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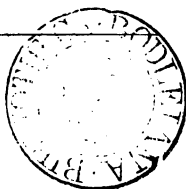
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THE
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AND
COMPANION.

VOL. XXVIII.—VOL. XVI., NEW SERIES.



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TO THE YOUNG PEOPLE

IN OUR

SUNDAY SCHOOLS AND FAMILIES,

AND

TO OUR READERS GENERALLY,

THIS,

THE TWENTY-EIGHTH VOLUME

OF THE

JUVENILE INSTRUCTOR,

IS DEDICATED

By the Editor.



COMPANIONSHIP.

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COMPANIONSHIP.



OUR natural instincts and desires teach us that we are not made to lead solitary lives. No one contains within himself all that is necessary for his happiness and well-being. This is true not only of grown-up people, but also of persons in their youth, of even boys and girls. Hence very few are found without having selected some one as a companion and friend, to whom they can confide more intimately and fully their thoughts and feelings.

But if the forming of companionships is so natural a thing, it is of great importance that those we form should be right ones. Companions have great influence over each other. Though we do not perceive it at the time, yet we are sure to become more or less like those we choose to associate with. For a young person to have an evil companion is one of the greatest misfortunes that can befall him. Many, very many, who commenced life full of promise, and were the joy and pride of their parents and friends, have been brought by evil associates to misery and ruin. The proverb says, "He that walketh with the wise shall be wise, but a companion of fools shall be destroyed." Will our young readers therefore take counsel from us and be careful to choose right persons for their companions? It has been said, "Always choose for your companion one that is wiser and better than yourself." We do not lay down such a rule, for if literally acted upon there could be no companionship formed, as the less wise and good would always be rejected by the superior person. But we do say most earnestly, never take a person for your companion whose intimacy and conversation will not tend to your good. You may have a companion with faults, but if he have vice at once discard him. A youth with bad habits and bad principles will inevitably corrupt every other youth with whom he associates. If you have a companion who goes wrong through weakness you may be a means of good to him, but if he go wrong through badness the case is quite different; you will not be able to lift him up, but he will certainly drag you down. You may put sound and unsound fruit together, but how are they affected by the contact? The rotten injures the sound, but the sound never communicates its soundness to the decayed.

Let every one of our readers then resolve that his companion shall be a helpmate, one that will help him to keep from nasty bad habits, from drinking and smoking, from a love of low and debasing amuse-

ments, from using obscene or even slang language, from being a fop as well as a knave or a sensualist; and who will help him in a direct manner to be intelligent, truthful, honest, industrious, kind, and courteous, indeed everything in character and life that a man and a Christian ought to be.

A HAPPY NEW YEAR.

BY C. LEACH.

BY the time you get the INSTRUCTOR containing this paper it will probably be the year 1877. The bells in the old church steeple will have rung the death-knell of the old, and the merry birth-peal of the new, year. Eighteen hundred and seventy-six, with all its joys and sorrows, will have fled to the Eternity from which it came; eighteen hundred and seventy-seven, with all its bright promises, will be before you. I very heartily wish that it may be a "Happy New Year" to all of you. I am sure it will be if you try to make it so. Do not forget that the year will be very much what you make it. If at the beginning you determine to be *better* boys and girls than you have been in the past, I feel sure that you will have a happy year.

The New Year is the time when men of business usually take stock, straighten their accounts as far as possible, and turn on to a new leaf.

Now, boys and girls, suppose we take stock and just see how matters stand.

All through the year 1876 God has given us our health, homes, parents, good clothing, schooling, books, teachers, and everything we have had. We could make the bill larger, but perhaps that is more than many of us will be able to settle well.

Now let us see what we have given God, or what we have done for Him. I am afraid we have not given or done much. When we have thought of all we can think of there is a great balance against us. I really don't like to take you over the year's accounts, page by page. Some of them are like the copy-books we have done at school, so badly blotted that we are ashamed of them. Suppose that instead of writing all about it in the JUVENILE, we go and tell Jesus, and ask Him to forgive us the debt, make our hearts clean, and help us to turn on to a new leaf.

And when we turn on to the new leaf, let us try to keep it free from blots. There are two or three blots I would specially name that you should try not to make. One is *disobedience to parents*. This is a dark blot on any one's page, but especially for Sunday-

school boys who read the JUVENILE. "Honour thy father and thy mother, that thy days may be long in the land which the Lord thy God giveth thee."

Another blot is *profaning the Lord's-day*. If we had space we might tell you of many that have made this blot, and lived to be very sorry for it. A young man condemned to die said to some one who paid him a visit, "My first step to crime was breaking the Sabbath."

Another blot is *neglecting prayer*. Every one of us, however young or however old, ought to do without making this dark spot on our new leaf.

Well, now which of you will try, along with me, to keep the new leaf clean? Hands up that will! I cannot see whether you hold your hands up, but GOD can. I pray that He may bless you, and give you all a very "Happy New Year."

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

BEN BARLOW was the son of Dr. Barlow, who, as everyone knows, was the only medical man in the pretty agricultural village of Woodbourne, a hamlet which lay like a half-way house between Hammerthorpe and Tinbury—two manufacturing towns in the midlands.

A very important man was Dr. Barlow—at least he was in Woodbourne. No public movement was taken up without first consulting him, and few meetings were held without his occupying the chair, though oftener than not professional calls compelled him to leave before the business was completed. He was a man of very decided opinions, and had a very decided way of expressing them. He had never known what it was to have a rival doctor in the village, and, as he had so long spoken his mind on professional matters without question or contradiction, he had at length come to think that his opinion on any subject was always the correct one.

Now, some of the doctor's most decided utterances referred to the vexed question of education, and among other peculiar notions he was never tired of asserting the immense advantages of life at a boarding-school. The fact was, he had himself been educated away from home, the school suited him, and he greatly enjoyed himself there. And therefore, according to his argument, it would suit and please any other boy.

"It's all very well," he would say, when he and quiet Mr. Bland, the rector, were discussing the subject in the surgery parlour; "it's

all very well to talk about home restraints, parental watchfulness, and that sort of thing, but it's possible to have too much of it—quite possible. A lad may be watched and coddled and taken care of till he's afraid to cast his own shadow without asking leave. I've no patience with it—none at all."

"But," the rector would ask, mildly, "though the rough-and-tumble life of a large school may suit a robust boy, don't you think it would make a shy, nervous boy more timid and——"

"There you are quite wrong," the doctor would break in, warmly. "Now, take a case. Take my own case. Till I was thirteen I was the most timid, shy, helpless little mortal you ever saw. But I went to a school where I had to hold my own, and it made a man of me. Why, bless my life! I should like to know what would have become of me—a man naturally of a retiring disposition" (the good doctor really believed he was not half self-assertive enough), "if I hadn't had a bit of my shyness rubbed off at a boarding-school."

"I've no fault to find with your church schools, mind you," he would burst off again, after a slight pause; "they are admirably conducted. Mr. Jones is a master of more than ordinary ability. I have no doubt whatever my son might get a fair education under him. But it's impossible under such circumstances to give lads the moral training they want. They can't learn sufficient self-reliance and independence. No, as I've always promised him, as soon as Ben reaches his thirteenth year I shall pack him off to Dr. Tasker's, at Worcester, where I went when I was a boy. That's the sort of school now! The doctor allows them plenty of liberty out of school hours, believes in out-door exercise, encourages manly sports, and never coddles. Ben will soon learn to take care of himself there, I'll be bound."

The idea of Ben Barlow leaving home to learn how to take care of himself brought an amused smile to Mr. Bland's face, and its humour would not have gone unnoticed by the doctor if he hadn't been so full of his admiration for his favourite academy. Most folks in Woodbourne would have said that a little *more* shyness would not hurt Master Ben's prospects in life.

Ben was a short, sturdy, rather thick-set lad, with untidy curly hair and light grey eyes, always on the alert and brimful of fun. As in most villages, the grades of social life in Woodbourne were not marked with so much distinctness as in towns. The only "aristocrats" of the village—the doctor, the parson, and Mr. Suter, the solicitor—were by their professional duties brought into familiar intercourse with their neighbours, and of course the young folks were still more intimate, especially as they nearly all went to one school. Ben was therefore the playfellow of all the village boys, and by his courage, strength, and venturesomeness he had become the leader of the village sports, and the promoter of most of the mischief of the place.

Like many other long-looked-for events, Ben Barlow's thirteenth birthday came at last, and when the village school broke up for the

Christmas holidays everybody knew that Ben was leaving it for good. His leaving home made him a sort of hero in the village. No one had ever been sent to a boarding-school from Woodbourne before, for the clergyman had taught his sons himself, and the lawyer's boys were hardly old enough. So all through the Christmas and New Year holidays Ben was the envied and admired of all his old school-fellows, to whom he never wearied of prophesying what he meant to do in his new circumstances. Enjoyable as had been his life at Woodbourne, he was eager to enter on his new experiences, for his father had fired his imagination with many a tale of schoolboy prank, adventure, and pastime.

At last the time for starting came. It was a sharp, frosty morning towards the end of January. Ben's box had been packed and corded the previous night, after being re-opened at least half-a-dozen times for something forgotten. He had been up since five o'clock, strolling about the stable, the yard, and the garden, feeding his rabbits and pigeons for the last time, and giving Bob the groom particular instructions as to their tending during his absence. At about eight o'clock he heard his father's cheery voice—

"Now, Ben! Bless my life! where is the boy? I believe he doesn't want to go after all. Why, when I first went to school, I wanted to start at daybreak. Here you are, Ben; the horse and gig have been waiting nearly five minutes. In with you."

A hurried putting on of overcoat, a warm embrace from mother and sisters, a crowing adieu from the baby, and a final pat of old Carlo's head, and Ben was seated beside his father in the gig, and rattling away over the elastic frozen ground towards Hammerthorpe.

Away they went, past the old church with its ivied porch and tower; round the corner of the rectory, from the windows of which Mr. Bland waved them a genial salute; past the mill, where Tom Blunt, the miller's son, rushed out to shout "Hurrah!" by the pond, where Charlie Thornton and John Williams were already sliding; across the common, where all the cricket matches were played, and on through country lanes, whose hedgerows Jack Frost had draped in fairy lace. By-and-by the lanes became studded on either side with straggling cottages, these huddled closer and closer together until the lanes became streets; further on the houses were replaced by shops, and scores of shivering apprentices were taking down the shutters, pausing after every one to blow their benumbed finger-ends. The streets became wider and more important, and at last a large building was reached, and Ben and his father, dismounting, found themselves in Hammerthorpe Station, where the porters were lounging about the waiting-room fires, expecting the arrival of the Worcester express.

Here we must suspend our narrative, and ask the reader to gather what he can of Ben's further proceedings from the letters which passed between him and his friends—in other words, from "Ben Barlow's Budget." How the letters were obtained needs no

present explanation. Suffice it to say no confidence is betrayed in their publication, and Ben himself will be very pleased if his correspondence furnishes amusement or instruction to those who read it. For the better understanding of the letters, a short personal sketch of Ben's various correspondents will be given.

Letter No. 1.

From BEN BARLOW to Dr. BARLOW.

Waterside House, Worcester,
Jan. 20th, 187—.

MY DEAR FATHER,—

I got here all right, only I almost lost my box at the station. I was met by one of the assistant-masters, and he brought me here at once.

The house is not quite so big as I expected. I was taken into the library and Dr. Tasker came and spoke to me. He seems a mild, pleasant old gentleman. Mrs. Tasker showed me my sleeping-room, and then I was taken into the schoolroom, where the boys were all at lessons.

I promised to write to Charlie Thornton, so I have not time for any more at present. With love to all at home, I remain, your affectionate son,
BEN.

Letter No. 2.

From BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
Jan. 20th, 187—.

DEAR CHARLIE,—

You see I am here. It was a jolly ride to Worcester; but what do you think? Almost as soon as I could get out of the train and look around, I saw a porter going off with my trunk in a thing like a big hamper on wheels. I soon got it off him, you may guess, and kept close to it, until an assistant-master who had come to meet me had it taken to a place they call a "cloak room"—why, I don't know. There were a lot more trunks than cloaks in it.

I should like you to see Mr. Henley—that's the master that came to meet me. I should think he's at least a head and shoulders taller than Mr. Slim, the auctioneer, and if anything thinner. The lads call him "Stilts." He's very pale, all but his eyes and nose, which always look as if he had been crying; but it seems he has nearly always got a cold in his head. Some say that is because the air must be cold so high up; but one of the big boys who is going to be a surgeon says it's because the circulation in his extremities must be very slow. I must ask father when I come home.

Worcester is a fine town—city, I ought to say, because it has a cathedral. My goodness, Charlie, you should see the cathedral. It would hold a dozen churches like ours. Our house is almost close to the river—the Severn you know. Shan't I have some boating this summer! It is a house about like Squire Burnley's at Upleigh. The schoolroom is a building by itself. There is a big playground and a meadow for cricket.

I have almost filled my paper, so I must tell you about the master and the boys when I write again—perhaps to-morrow.—I remain, yours truly,
BENJAMIN BARLOW.

P.S. Just call and remind Bob that my hutch wants another bar in the door, or else the black doe will get out and be killed by the cats.

Charlie Thornton, to whom the preceding letter was addressed, was Ben's special and particular friend—a lad after his own heart. His father was the village stationer and postmaster. Charlie had been Ben's second in all his fights, his companion in all his adventures, and his trusty defender in all scrapes, and he very much regretted that his father was not able to send him to Worcester with Ben. He had listened eagerly to all the wonderful expectations Ben had indulged, and was almost personally interested in his anticipated experiences. In Ben's absence he, of course, took the leadership of the village playground, and this distinction served in a measure to reconcile him to the loss of Ben's companionship.

Letter No. 3.

From BEN BARLOW to Dr. BARLOW.

Waterside House, Worcester,
Jan. 21st, 187—.

MY DEAR FATHER,—

I am just going out for a game, so havn't time to write much; but I find I forgot to bring my skates, after all. I kept them out of sight for fear mother should not like me to bring them. Tell Mary they are behind the spice-box in the kitchen cupboard, wrapped up in sugar paper. I hope you will send them; there is such splendid skating—where the river has flooded the meadows—and so safe. The boys say you can send them by train for sixpence as a parcel.

Don't tell mother, but let me have them quick—before the frost goes. With best love, I am, your affectionate son,
BEN.

P.S. Ted Instone—one of my room-mates—has been looking over my shoulder, and he says I ought to finish up “your dutiful son” when I write to you.

(to be continued.)

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

I. NATURAL PRODUCTS—COAL AND IRON.



IN making my first appearance before the readers of the JUVENILE INSTRUCTOR, I would take the opportunity of stating the design of the series of papers which I have undertaken to contribute. My wish is to supply a brief description of a few of the materials, processes, and apparatus made use of in the various products of industry and skill constantly before our eyes. It is, I think, desirable that our young friends should acquire a knowledge of such products, and an interest in those who, by their hard work and patient ingenuity, supply them. Every article and process can be made to have a value in proportion to the amount of knowledge we possess respecting them.

In the present paper we shall speak about Coal and Iron. These are the two fundamental elements of art and industry, and contribute more than any other mineral productions of the earth to increase the riches, multiply the comforts, and so ameliorate the condition of mankind. The true source of England's wealth is coal. Iron now forms an important branch of our commerce and industry, but without coal this metal could not be applied to its present numerous serviceable uses. If for the veins of coal found in the bowels of the earth veins of gold were substituted, we should be grievous losers by the exchange. The value of the annual production of all the gold and silver mines of North and South America was estimated by Baron Humboldt at £9,248,000. But the value of the coal produced annually in Great Britain alone is computed at about £35,000,000 sterling, when delivered at the places of consumption. At the same time the value of the iron brought into a manufactured state through the agency of coal is £20,000,000 more. Without coal our country could not be the factory for supplying the great family of mankind with most of its material necessities. Deprive us of our coal, and we should be no longer able by our commerce to convey the benefits of knowledge and civilisation to the remote regions of the globe. Without coal steam-power would be annihilated, and, with the loss of that, our prosperity and supremacy as a nation would go. Our steam-engines would rust unused for lack of fuel; our factories would be closed; our railroads be untraversed; our steam-vessels be dismantled and decay in dock; and all our processes of manufacture deteriorated, if not fully stopped. The future historian of the revolutions of empires would date the decline and fall of the vast dominion of Britain from the period when her supplies of mineral fuel were exhausted, and her last coal-fields worked out.

ORIGIN OF COAL.

Coal, it is generally admitted, is the product of decomposed vegetable matter. It is the result of changes produced, during many ages, upon vegetable matter buried in the earth by the various convulsions which it has undergone, and pressed into layers or strata. To raise this invaluable fuel powerful machinery is used, and deep shafts are sunk, at an enormous expense. Before coal is found, many layers of soil, sand, clay, and stone have to be dug through; and, after passing through hundreds of feet of these, it is found as a thin layer or seam extending over a large surface. A clay is found beneath it, then more sand and water, then a thicker seam with clay beneath, and so on for many feet down. One monster seam is as much as thirty feet thick. It is evident that the lowest coal seam was formed first; it was a swampy forest, and the rotten branches and fallen leaves mixed with the water-plants, and formed a black bog. Sand and mud gradually covered it up, and it sank beneath the surface of the ground, for rolled pebbles and sand are found on it, and they can only be produced by running water. After a while a fresh forest formed, decayed, and was covered up in its turn. This destruction and re-formation went on for ages, for in the cliffs of Nova Scotia the coal seams can be seen one over the other for many hundred feet. In the mass coal exhibits externally but little appearance of organised matter; but when thinly sliced, polished, and placed under the microscope traces may be observed of vegetable structure, and occasionally the external form of a plant has been preserved. In the coal, therefore, with which we warm ourselves, and by which we gain incalculable commercial advantages, we have the forests of primæval times, deprived of their variety and volatile parts, but preserving all their combustible matter, which by a happy provision is laid up for our use in vast deposits under our feet, closely packed and protected from air, rain, and floods by a solid covering of rock and soils. Few who are in the daily enjoyment of the comforts and advantages derived from abundant supplies of this fuel think of the long and obscure process by which it was prepared in the laboratory of nature, a cubic inch of which in many instances contains thousands of vegetable cells.

HISTORY OF COAL.

The earliest known record of the existence of coal is the description given of this fossil by Theophrastus, the pupil of Aristotle; for the occasional use of the word in our translation of the Scriptures evidently refers to burning wood. The use of coal is supposed to have been known to the Chinese at a very remote period. Numerous mines are worked in China at the present day, but the mode of working is of the rudest description; there are no shafts nor machinery of any kind. A flint axe found stuck in a vein of coal at Craig y Parc, Monmouthshire, proves it to have been known by the Ancient Britons; and the ashes discovered in the Roman stations at Lanchester and

Elcheater, in the county of Durham, and other places, bear conclusive testimony to the use of coal by the masters of the world. Some have argued that it was known to the Saxons by the name of *Givefan*. One of the earliest documents in which coal is mentioned is the *Bolden Book* of Bishop Pudsey, dated 1190. It was first used for domestic purposes in this country at the latter end of the 13th century, and was brought about by the rapid consumption of timber. Like most other innovations it was received with suspicion, and had to contend against prejudice. It was looked upon as so dangerous an innovation that in 1306 Parliament petitioned King Edward I. on the subject. "His Majesty," says Stone, "by proclamation prohibited the burning of sea-coals in London and the suburbs, to avoid the sulferous smoke and savour of the firing, and in the same proclamation commanded all persons to make their fires of wood." The same writer adds that "the nice dams (*dames*) of London would not come into any house or roome where sea-coales were burned, nor willingly eat of the meat that was either sod or roasted with sea-coale fire." Measures of coercion were resorted to, but their futility will be apparent from the fact that twenty years afterwards coal was used in the royal palace. Still, the use of this fuel was by no means generally adopted. Mr. W. Blishe, in a periodical published in 1649, says that "it was not many years since the famous city of London petitioned the Parliament of England against two nuisances, and these were 'Newcastle Coals and Hops.'"

IRON.

The use of this metal is of very high antiquity. Its first discovery is ascribed by the ancients to fabulous deities and heroes. There are sufficient reasons for believing that the antediluvians were well acquainted with the art of procuring the common metals from their ores. In the fourth chapter of Genesis Tubal Cain is mentioned as being an instructor of every artificer in brass and iron; so that at this period, in the lifetime of Adam, the metals must have been in common use. In the Pentateuch it is mentioned as being employed in the fabrication of swords, knives, and other edged instruments. Some estimate may be formed of the value attached to the metal from an expression in the eighth chapter of Deuteronomy, where Moses eulogises the Land of Promise as "a land whose stones are iron."

IRON ORES.

The ores of iron are scattered over the crust of the globe with a beneficent profusion proportioned to the utility of the metal; they are found under every latitude and every zone; in every mineral formation, and are disseminated in every soil. Iron is seldom found in a native state, but as an oxide, or combined with sulphuric, carbonic, or other acids. Few mineral bodies are without some admixture of it—sand, clay, and water are scarcely ever free from it; and even animal and vegetable substances deposit it after being burned to

ashes. The ores are divided into a number of species, each including sub-species. For manufacturing purposes the following are the principal :—Native iron, containing a very great proportion of pure iron ; iron pyrites, composed of iron and sulphur ; meteoric iron ; magnetic iron ore ; red hematites ; specular iron ; red oxide of iron ; brown iron ore ; carbonate of iron. In some places the beds of iron-stone lie so near the surface that they can be worked as quarries ; others lie hundreds of feet down in the earth, and great expense is incurred in procuring them.

CAST AND WROUGHT IRON.

Iron can be both cast and wrought, having the peculiar capability of being "welded," that is, of softening by fire to such an extent that when two pieces are made white hot and laid together, a few blows of the hammer will cause them to unite as one piece. It is by means of this most useful quality that large masses of wrought iron are produced ; such, for instance, as anchors and cranks for steam-ships. This property of welding renders iron one of the most useful materials supplied by nature for the various purposes of manufacture. In combination with carbon, it forms that hardly less useful article, steel. Cast iron has scarcely any of the metallic lustre, and is only fitted for solid work ; it is brittle like steel, without its elasticity, and is too soft and porous to be made into any of the numerous tools and instruments for which steel is so eminently suitable. Cast iron is converted into wrought or malleable iron by being re-melted and stirred for a long time in contact with the air. This process is called "puddling ;" its object being to get rid of all the impurities, which, by being brought into contact with the air at a high temperature are said to be burnt out—that is, they combine with oxygen, and form carbonic and sulphurous acids, which escape as gases. After puddling, the iron is rolled or hammered out, folded up, and again extended, and as a general rule, it may be said, the more this is continued the purer and softer is the iron. When pure, iron is capable of being rolled out into very thin sheets. Many years ago there was sent to England from Pittsburgh, in the United States, a letter written on a sheet made from iron, 1000 sheets of which laid upon each other would only make one inch in thickness, the dimensions being 8 in. by $5\frac{1}{4}$ in., or a surface of 44 inches, and weighing 69 grains. Since then Wales has surpassed America, Staffordshire has surpassed Wales, and Wales again surpassed Staffordshire, till at length Swansea succeeded in making a sheet of the finest appearance and thinnest that has ever been seen by mortal eyes, 10 in. by $5\frac{1}{4}$ in., or 55 in. surface, and weighing but 20 grains, and being, indeed, a sort of iron "gossamer." This being brought to the standard of 8 in. by $5\frac{1}{4}$ in., or 44 surface inches, is but 16 grains, or 30 per cent. less than any previous effort, and requiring at least 4800 sheets to make one inch in thickness.

It may be added with regard to the usefulness of this metal, that

not only is it applied to the construction of railways, bridges, ships, and a thousand other purposes, but many preparations of it are used in medicine. Medical science has discovered many valuable properties in it, and, in certain conditions, iron now forms a medicine of much virtue, and is the only metal found to be friendly to the human frame.

OUR SUNDAY SCHOOL ALBUM.

BY ENOCH GRATTON.

I.



It is a very common thing now for people to have their likenesses taken. Parents and children like to have each other's portraits. Friends frequently exchange "cartes" with friends; and we all like to have the pictures of those we love and admire, especially if they have been removed to distant parts of the earth, or taken to that land where all is intensely real and spotlessly pure.

Now this desire for and delight in the portraits of our loved ones can be easily and inexpensively gratified. Such is the skill of modern artists that almost any one who wishes may have his likeness taken. Further, in order to *preserve* their likenesses, to prevent them from being lost or soiled, many people secure a neat or handsome album. When "cartes" are thus kept, it is convenient to show them to friends and visitors. Now, my dear young friends, I have several albums; but I have one in particular in which I keep the "cartes" of persons I have met with in various Sunday schools in different parts of the country. This I call my SUNDAY SCHOOL ALBUM, and I want you kindly to look into this album, and allow me to have a number of quiet talks with you about some of the individuals whose likenesses it contains. You may not know all these people; but some I feel sure you will know, for they live in your locality, attend your Sunday school, and possibly dwell in the very house you dwell in.

If *your own* "carte" should be in my album, pray don't be offended. Some people are soon offended in this matter of portrait-taking. They say that no artist ever does them justice. Either the picture is too light or too dark; there is a want of clearness in the eye or a want of cheerfulness in the expression. On the other hand, some are easily pleased.

A little boy named Frank, in whom I have rather a special interest, was almost wild with delight the first time he actually saw his own likeness. He was ever so much bigger from that moment. But without any more words by way of explanation, allow me to introduce to your notice my excellent friend

MR. GOODHEART, THE CAPITAL SUPERINTENDENT.

The post of honour, the first page in my album, I cheerfully give to this worthy man. I show this likeness with pleasure, for I know that it graces and dignifies my album. Good as the picture is, it does not flatter my friend. Others may be weak and fickle; he is ever steady, strong, and sure. His face is open and manly, his eye clear and quick, able to see through a ladder, or, if need be, round a corner. His voice is agreeable and winning, yet well able to command and control. He has a willing hand, a wise head, and a warm heart. He is not a fine-weather worker simply. He is not troubled with Sunday "poorly bouts." He wears good strong boots, and is not afraid of rain or wind or snow. He has long had a reputation for thorough kindness; still he is not afraid of speaking the truth, or of rebuking the indolent and unruly. More than once he has put his feet on the toes of Mr. Books, the librarian, and sharpened the pen of Mr. Scribe, the secretary, and quickened the speed of Mr. Tardy, the slow-coach.

But in spite of all this he is loved for his work's sake. The children love him, the teachers admire him, the minister esteems him very highly, and prays that he may "live for ever."

In his school order is secured and maintained, the sick are visited, the wanderers are sought, and prosperity is secured.

II.—MR. TARDY.

We will now turn to the next "carte" in my album. It is a likeness of Mr. Tardy. He belongs to a very large and old family, and has cousins in most parts of the world. He has long been a trouble to his superintendent, a pest to his fellow teachers, and a bad example to his scholars. Teachers' meetings and Sunday-school conferences have attacked him so frequently that you would have thought by this time he would have been either cured or killed. But he lives still, and still he is late.

Sometimes five, sometimes ten, or occasionally twenty minutes late. If you could only see the dear, easy soul getting ready for school, or on his way there, or when he is there, you would never forget it. What does it matter to Mr. Tardy that the school has been opened ten minutes, that the superintendent is at his wits' end for teachers, or that his scholars are not only themselves without a guide, but are annoying other classes?

Mr. Tardy walks deliberately up the school with smiling face and squeaking boots. Of course, it looks big and important to come in late. If he came in time nobody would notice him, and people might even think that he was nobody. But he shows them he is somebody by keeping them waiting for him, and letting them know when he *does* come. If our friend is going to a concert, or a pic-nic, or an evening party he will be in time; but when it is only a Sunday school, and to meet only a lot of children, it does not matter for being late.

Possibly you may wonder that I should allow such a man to have a place in my album when I tell you that I consider that he is a bit of a thief. He robs his scholars of part of the instruction and oversight he should give them, robs his fellow teachers of the attention of *their* scholars, and he robs his superintendent of much calmness and good temper.

III.—THE MISCHIEVOUS SCHOLAR.

On the next page is a portrait of a boy well known in most schools. Look at his face; there is a roguish twinkle in his eye and a roguish twist in the corner of his lips. His idea of going to school is largely for the fun of the thing. He is not really vicious or bad at the bottom, but he has a keen eye for whatever is comical or ludicrous. He is fond of making queer noises, putting his hands to his ears during singing, putting queer smelling things on stoves, mimicking anything peculiar in the teacher or scholars. He is fond of sticking pins in other boys' jackets, of getting near to a creaking bench and shaking it on the sly, of seeing his teacher in a fix, of making other boys laugh or cry. Altogether, this young gentleman is a Q.C.—that is, a queer customer—and though he causes much anxiety now, he may yet turn out to be a true disciple and a brave soldier of Jesus Christ.

Mr. Littlefaith says, "He will never be any good," Mr. Crusty says, "Turn him out;" but Miss Kindheart replies, "Where will you turn him to? Into the streets? Back to his godless home? Away to the public house, to the gambling table, to the concert hall, or among vicious and deceitful companions?"

No, don't turn the roguish fellow out; rather make him a special object of tender care and fervent supplication, and, like some others who were once as mischievous as he is, but now are rendering most acceptable service in the Sunday school, in the pulpit, and in the mission field, this lad may outgrow all his tricks and waywardness, and take his place in the front rank of those who fight manfully the battles of the Lord, and are crowned with imperishable glory.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XI.—ANIMALS.



An old adage tells us that variety is charming, and in the diversified objects that the earth presents to our view we behold what a great philosopher calls Nature's *inextinguishable* variety. That our treatment may agree with our subject, we will now for a while leave inanimate things, however interesting, and take a rapid survey of some of the wonders of animal life. We can hardly help feeling a strong

interest in creatures that like ourselves are gifted with the power of self-motion, are enabled both to feel pain and enjoy pleasure, are impelled with desires and passions, and possess, in varying degree, the wonderful faculty which we call understanding. The animals that inhabit our globe are innumerable, and in their habits, instincts, and organisation we shall see proofs of beneficent design, not less remarkable than those that we have already beheld in the stupendous magnificence of mountains, rivers, and seas. The beauty and diversity of their forms, the peculiar adaptation of their structure to their mode of life, and their great usefulness to man, will all excite within us enlarged and more intelligent praise to our God. Job expressly sends us here for instruction: "Ask now the beasts, and they shall teach thee; and the fowls of the air, and they shall tell thee: or speak to the earth, and it shall tell thee; and the fishes of the sea shall declare unto thee. Who knoweth not that in all these the hand of the Lord hath wrought this?" If the creatures that inhabit this world are so infinitely varied, how great must be the power and wisdom of Him who formed them all! We should think him a far cleverer man who could make steam-engines, and iron ships, and stone houses, and household furniture, and watches, and clocks, and all sorts of scientific instruments, and who could make all these things in such a peculiar way that as soon as one began to be worn out a new one grew in its place, than he who could only make one of these things, and that one in such a way that when it became useless he had to begin at the beginning and make another exactly in the same way. And so the power and wisdom of God are more seen in the vast numbers, and various perfections, of the creatures He has made, than if He had made only a few sorts; and more seen in the fond way these creatures rear their young, than if He were constantly making fresh creations as at the beginning. And His wisdom is also conspicuous in the fact that whereas the cleverest thing a man can make is only a machine after all, the creatures He has made possess the power of self-direction. Many of the actions performed by dogs, elephants, horses can only be explained by supposing they have a degree of understanding, and entire liberty to originate and direct their own movements. But the movements of the cleverest machine are of a very limited character, and they must be started by a power from without. Of course there is a vast difference in the structure of animals. Some have feeling only, and that in a low degree, whereas others have all our senses and understanding as well. The difference between a polypus and a monkey is far greater than that between the mind of a savage and a Newton. That animals of the higher class are endued with understanding, and do not move by blind and ignorant impulse merely, is seen in the fact that they vary their proceedings according to the different necessities of particular cases. Many an instance might be given in which lions, elephants, dogs are plainly seen to have put two things together, and from them to have deduced a third and then acted accordingly.

The goodness of God is very plainly displayed in the varying years of the duration of animal life. The length of life of the different orders of animals is seen to have a relation more or less exact to their numbers, and the rapidity of their increase. The creatures that multiply in great numbers enjoy a life of but brief duration, while those that live for a great many years, as the lion, for example, increase but slowly. Were it not for this wise arrangement, the earth might quickly be over-populated, and those creatures that God intended to be beneficial to man would become his bane, and ere long absolutely lead to his extinction. It is probable that just as at any time there always is, and always must be, exactly the same quantity of water upon the earth, either in the rivers and sea, or as vapour floating in the air, so there is always the same amount of organic life. Vegetables draw their nutriment from the soil and the air; animals live on vegetables, and on each other; and it is impossible for anything to live and flourish except by the destruction of something else. But that something else is not really destroyed; its form is simply changed, and its scattered elements go to build up some other kind of life. The plants that now adorn and beautify the earth are prevented from spreading over it, and converting it into a jungle, by the animals that feed upon them; and these are kept in bounds by being let loose upon each other. The order and harmony of creation are thus maintained by apparent strife and discord. But the discord is only seeming, for just as the air is kept pure and healthy by winds and storms, and the ocean is preserved from pollution by its constant ebb and flow, so the forces of life are kept in beautiful and perfect balance by being set over against each other.

The movements of animals vary as much as their size and shape. Some are exceedingly fleet; others very slow; but their power of motion is always adapted to their circumstances. Where their food and habitation lie near, they are not gifted with great swiftness, because they do not need it. But where their food is distant, or they have to travel fast to escape their enemies, they can move almost as swift as birds can fly. And, from the bison to the mouse, the body is exactly poised so that all their motions are easy and graceful. The head and limbs and various parts of the body are seen to be adapted to their various modes of life, just as plainly as the eye is designed for seeing, and the ear for hearing. The giraffe, for example, a sleek and beautiful creature, has a most remarkable shape. Its length of neck is enormous, which, added to moderately long legs, makes it so tall that it could look in at the windows on the second floor of an ordinary house without standing on "tiptoe." But when we find that it subsists by cropping the branches of certain trees, we see that its long neck is neither a freak nor an accident, but that there is a divinely intended correspondence between the animal's structure and its food. The slender and elastic legs of that eminently handsome creature the deer, its surefooted hoofs, and its remarkable acuteness of vision and of hearing, are just as plainly the result of contrivance,

and point to its seeking safety, not in fighting with its enemies, but in fleeing from them. Is not contrivance also seen in the fact that the animals of very cold countries are furnished with thick coats of hair or fur? And the elasticity of nature is seen in the circumstance that animals from milder climates when taken to these cold regions soon grow a larger and thicker coat of hair, whereby they are enabled the more effectively to resist the cold. The same elasticity is also seen in the thicker coat that animals native to cold climates are always found to have on the approach of a season of extraordinary severity.

“The Indian hunters asserted,
Cold would the winter be, for thick was the fur of the foxes.”

Another illustration of the goodness and wisdom of God may be seen in the arrangement whereby the various countries of the earth are stocked with animals peculiar to their climate and productions. The elephant and rhinoceros, the lion and the tiger, are found only in those countries where a rapid and luxurious vegetation, and innumerable tribes of animals, require the efforts of such monstrous devourers to keep them in check. That the productions of every country are so varied as they are, ought to excite within us deep gratitude to God. It would be a great calamity for every land to be like every other in its animal and vegetable growths. Where, then, were the motives of gain, and of adventure and discovery, that now send the merchant and the explorer on their travels? The ocean would separate instead of uniting, and each country would live as much apart as the stars in the sky. But as it actually is, one country supplies what the other does not possess, and the varieties of the countries bring their inhabitants into closer contact, and enable them the more perfectly to serve one another. It is an extensive illustration of the old parable; “If the whole body were an eye, where were the hearing? If the whole were hearing, where were the smelling?” The various countries of the world may be compared to the different members of the human body, and an unfettered intercourse enables one to supply the lack of another, and all to work together for the general good. This is a reason why we should take interest in all that goes on all over the world; and why we should seek to know as much about the habits of the lion, and tiger, and leopard, and giraffe, and other animals peculiar to tropical climates, as we know about those familiar domestic pets that are fed with our own hands, and grow up beneath our own sight.

Some of these animals we will now more particularly describe, and as we proceed in our studies we shall see the most evident footprints of Divine goodness and wisdom and power. The conviction will come into every reflecting mind with such force as to produce the astonished exclamation of Jacob, “Surely, the Lord is in this place, and I knew it not!” We shall behold, in all directions, manifestations of a beneficent God, who, so far from confining Himself to the solitudes of eternity,

comes forth, and, for our advantage, writes His character plainly on the myriad objects of Nature:—

“Lives through all life, extends through all extent,
Spreads undivided, operates unspent.”

BAND OF HOPE PAPER.

IT'S THE SIGN THAT'S WRONG.



OUR class had mustered up well at the C— Sunday School, for we had been informed that a quaint old friend was going to address the scholars.

A treat was in store for us, we knew, for we had heard him before, and his droll manner and broad speech had amused us very much.

Lessons were over, a hymn was sung, our friend was introduced, and we were all eyes and ears to watch the singular movement of his limbs and to hear his dainty talk. His address on the previous occasion was intended for the girls, and his satirical talk about abominable chignons and extravagant dresses made it quite a savoury discourse for us big lads, whatever it might be for the girls. It was our turn this time, however. Gold-headed canes, hoops, and other fal-de-dals came in for a deal of condemnation, and no doubt the girls were in high glee, and although we relished his peculiar dialect, we felt ourselves to be in no enviable position when he made his significant nod towards “ye young men in t' corner there.”

But what I want to tell you is this.

We had often seen him smoking, and were not a little surprised when he condemned bacca, cigars, and all such like “as being good for nowt, and worse nor that.”

This seemed inconsistent, but he quickly explained that he had formed the habit when young, and it was now too late to relinquish it.

Then he condemned “drink” as being “a deadly poison, that could do no good, but often lead to mischief,” and he warned us to keep away from the public-house and the gin-shop.

None of my class-mates were frequenters of the ale-bench, and although we were not abstainers, we felt annoyed that he should seem to be preaching for our ears, and our ears alone.

However, we listened to him attentively, and as the way home for most of us lay in the same direction, we went on the streets together discussing the merits and demerits of his address.

“Look here,” said one of our number, “here’s Mr. J——’s shop.”

“Yes, we all know that,” said I; “what of that?” “Read the sign,” said he.

We did so, and in bright gilt letters big enough to be read from a great distance, we read:—

"John J——, Licensed to sell Tea, Coffee, Tobacco, Cigars, Snuff, etc. Also Beer not to be Drunk on the Premises."

I suppose you will say that we acted indiscreetly, but, without thinking much about it, we went to the house door behind the shop, and asked for Mr. J——.

He was in, and was glad to see us.

My class-mates had appointed me head-spokesman, so I told him very briefly that we were of opinion that either the address that he had given that afternoon or his shop-sign was a great mistake.

He was a curious customer, and we were not surprised to see him walk out without saying a word.

In a few minutes he returned and said, "I've been looking at the sign, and it's the sign that's wrong, and down it comes to-morrow, if you'll all join the Band of Hope."

Now we were put to the test. Little did we anticipate that our friend would meet us in this way.

But so it happened, and one of the most flourishing Bands of Hope in the district is conducted by our old friend J——, and addressed at times by some of my class-mates, who now think that "the sign was wrong."

THE CHILDREN'S BOOK-SHELF.

By the Editor.

TO MY YOUNGER READERS.



Y DEAR BOYS AND GIRLS,—When I was young like you I was very fond of reading, and I generally found that I read a book with more pleasure when I could call it my own. I therefore used to save what little pocket-money I could get, and when it amounted to a sum sufficient for the purpose, I invested it in a book.

To have my books where I could find them when wanted, I made, though I must admit in a very clumsy way, a tier of little shelves, which I fixed up in my bed-room. But while I found a difficulty in getting the means to buy books, I had as great a difficulty in deciding what books to buy when I had the means. I had to get the information I required as I best could, and sometimes I bought at a venture, or decided to purchase by the mere title of the book or its outside appearance. It, therefore, not unfrequently happened that I laid out my carefully-saved pence on books which were unsuitable to me, and which did me no good.

Now I should like to encourage you to form a little library of your own, and I am also wishful to save you from the mistakes I occasionally fell into, in the purchase of your books. Books are like

companions ; they will do us good or they will do us harm as they are good or bad themselves.

But before I tell you what books to put on your shelf, I would say why I wish you to give attention to reading. Those of you who have formed the habit will thereby be led to persevere in it, while you who may love play better than books will, I hope, have your taste greatly modified, if not altogether changed.

In turning this matter over in my mind I remembered that I had read some time ago a letter of a father to his little boy, which I thought would be suitable for my purpose. I accordingly found it, and was so pleased with the very clear way in which it states the advantages of reading, and also the purpose for which we should read, that I resolved to give you the substance of it in this article, instead of doing what I first intended—write something of my own.

The letter is from John Sterling to his boy, when he was between seven and eight years old. It was written from Rome, and may be found in the "Life of John Sterling" by the celebrated Thomas Carlyle.

"When you see how much more grown people know than you, you ought to be anxious to learn all you can from those who teach you ; and as there are so many wise and good things written in books, you ought to try to read early and carefully, that you may learn something of what God has made you able to know. There are libraries containing many thousands of volumes, and all that is written in these is—accounts of some part or other of the world which God has made, or of the thoughts which He has enabled men to have in their minds. Some books are descriptions of the earth itself, with its rocks, and ground, and water, and of the air and clouds, and the stars, and moon, and sun, which shine so beautifully in the sky. Some tell you about the things that grow upon the ground ; the many millions of plants, from little mosses and threads of grass up to great trees and forests. Some, also, contain accounts of living things—flies, worms, fishes, birds, and four-legged beasts. And some, which are the most, are about men and their thoughts and doings. These are most important of all, for men are the best and most wonderful creatures of God in the world, being the only ones able to know Him and love Him, and to try of their own accord to do His will.

"These books about men are also the most important to us, because we ourselves are human beings, and may learn from such books what we ought to think, and to do, and to try to be. Some of them describe what sort of people have lived in old times and in other countries. By reading them we know what is the difference between ourselves in England now and the famous nations which lived in former days. Such were the Egyptians, who built the Pyramids, which are the greatest heap of stones upon the face of the earth : and the Babylonians, who had a city with huge walls, built of bricks, having writing on them that no one in our time has been able to

make out. There were also the Jews, who were the only people that knew how wonderful and how good God is; and the Greeks, who were the wisest of all, in thinking about men's lives and hearts, and who knew best how to make fine statues and buildings, and to write wise books. By books, also, we learn what sort of people the old Romans were, whose chief city was Rome, where I am now; and how well they could govern and teach many nations which they had conquered.

"It is from books, too, that you must learn what kind of men were our ancestors in the northern part of Europe, who belonged to the tribes that did the most towards pulling down the power of the Romans; and you will see in the same way how Christianity was sent among them by God to make them wiser and more peaceful, and more noble in their minds. And how all the nations that now are in Europe, and especially the Italians and the Germans, and the French and the English, came to be what they now are. It is well worth knowing (and it can be known only by reading) how the Germans found out the printing of books, and what great changes this has made in the world. And everybody in England ought to try to understand how the English came to have their Parliaments and laws, and to have fleets that sail over all the seas of the world.

"Besides learning all these things, and a great many more about different times and countries, you may learn from books what is the truth of God's will, and what are the best and wisest thoughts and the most beautiful words: and how men are able to lead very right lives, and to do a great deal to better the world. I have spent a great part of my life in reading, and I hope you will come to like it as much as I do, and to learn in this way all that I know.

"But it is a still more serious matter that you should try to be obedient and gentle, and to command your temper; and to think of other people's pleasure rather than your own, and of what you *ought* to do rather than what you *like*. If you try to be better for all you read, as well as wiser, you will find books a great help towards goodness as well as knowledge—and, above all books, the Bible, which tells us of the will of God, and of the love of Jesus Christ towards God and men."

This is a most excellent letter, and my young readers will, I hope, thank me for putting it within their reach. That is, they will read it again and again with great care until they can understand and remember the interesting information it gives.



THE EDITOR'S TABLE.

"X. Y. Z." (Buraem) wishes to know who is the author of the hymn beginning "Here we suffer grief and pain." We believe it was written by Thomas Bilby, who died in 1872. Of him, however, we cannot give any information.

"A. B. C." asks, "What were the scales which fell from the Apostle's eyes?" See Acts ix., 18.

ANSWER.—In the verse referred to it is not said that scales did literally or physically fall from the eyes of the Apostle. The words are, "There fell from his eyes *as it had been* scales." Dr. Hackett, in his "Commentary on the Original Text of the Acts," just published, says it means, "that he experienced a sensation as if such had been the fact." "The Greek word," he adds, "shows that it was so in appearance, not in reality." St. Paul's eyesight was affected by the vision which he had of Christ on his way to Damascus, but the nature of the injury cannot be determined. He was without sight three days after the vision, and it is also stated that he did neither eat nor drink. With Dr. Wheedon we think that we are to look for the cause of this blindness less into the region of matter than of soul. "It was, perhaps, the powerful collision of spiritual forces, the Divine upon the human, which drove the perceptive power of Saul inward and disabled it from action." And in reference to both his blindness and abstinence of food, he justly remarks, "If we contemplate the awful struggle within the mighty spirit of this great man in the present heyday of his young manhood, we shall not wonder that its violence left no vitality for the outward perceptions or sensations." And so, when Ananias laid his hands on him, and said, "The Lord Jesus has sent me, that thou mightest receive thy sight, *and be filled with the Holy Ghost*," he did not obscurely intimate the cause of his physical cure. If a literal interpretation of the words "scales from his eyes" be adhered to, well, the conjecture of this commentator is reasonable: "Very probably during the *three days* the humours had dried upon his eyeballs, and as the abounding of Spirit quickened the whole man, the scale-like particles fell from his eyes, thus forming a striking emblem of his renewed spiritual sight."

"H. L. W." wishes us to give our opinion of the following, which he has copied from the *Leisure Hour* for 1857, page 720: "The proposed railway to India through Assyria, it is expected, will ultimately be joined to Egypt by a line to Alexandria; if so, we shall then have accomplished literally for the first time in history the prediction of Isaiah's prophecy—xix., 23—24, "In that day shall there be a highway out of Egypt to Assyria, and the Assyrian shall come into Egypt, and the Egyptian into Assyria, and the Egyptians shall serve with the Assyrians. In that day shall Israel be the third

with Egypt and with Assyria, even a blessing in the midst of the land.”

Our opinion is that the formation of the railway referred to would not be the accomplishment of Isaiah's prediction. How can it be while the Israelitish people have no national existence, and, instead of occupying their native country, are dispersed over the face of the earth? In their present condition they cannot become “the third with Egypt and Assyria.” For this a restoration to their own land is necessary.

Frederick Johnson (Ardale) writes—“Will you be so kind as to tell me the meaning of Luke xviii., 8—‘Nevertheless, when the Son of man cometh, shall he find faith on the earth?’” The event referred to is the second advent of Christ, and the faith inquired about is “that special faith of which the widow's is an image, which, in spite of the judge's obstinate silence and long apparent indifference, perseveres in claiming its right.” Our Lord's question seems to intimate that the faith of His people will scarce hold out till His second coming. “The Church,” says Wheedon, “will all but faint in her prayer and watchfulness before that day. This is clearly in unison with those texts which represent that it will be upon an apostate earth that the judgment-throne of Christ will appear.”

With regard to the other questions of our correspondent, we reply the Scriptures do not say.

2 Kings xx., 1—6, has puzzled the young men's class at Ainsworth, and they wish to know whether God changed His mind in adding fifteen years to King Hezekiah's life after He had told him to set his house in order, for he should die and not live.

We see nothing so very perplexing in Hezekiah's case. He is seized with a sickness which of itself will be mortal. The prophet is instructed to tell him this, and urge him to prepare for the fatal issue. “Thou shalt die and not live,” is not the announcement of a Divine decree concerning the king, but the giving him information as to the natural issue of his sickness. Whereupon Hezekiah was in sorrow, and prayed to God for help. He does not specifically ask for his life to be spared, but he asks God to remember him, and no doubt this request included his recovery. His prayer is answered; the prophet is told to turn again and say from the Lord, “I have heard thy prayer; I have seen thy tears: behold, I will heal thee: and I will add unto thy days fifteen years.” The whole narrative is an encouraging illustration of the efficacy of prayer. “This poor man cried unto the Lord, and the Lord heard him, and delivered him out of his trouble.”

SUNDAY-SCHOOL DEPARTMENT.

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SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

JANUARY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
7 Godly Living.....	Coloss. iii. 12—25	Ver. 17
14 The Good News	Matt. ii. 1—12.....	Luke ii. 10
21 The Infant Saviour.....	Matt. ii. 13—23 ...	Luke i. 82
28 Jesus Baptised & Tempted	Matt. iii. 13 to iv. 11	Heb. iv. 15
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
7 The Kingdom divided	1 Kings xii. 1-5, 12-20	Prov. xii. 5
14 The Sin of Jeroboam.....	1 Kings xii. 25 to xiii. 6	Isa. ix. 16
21 Omri and Ahab.....	1 Kings xvi. 21-34	Prov. xiv. 11
28 Elijah the Tishbite.....	1 Kings xvii. 1-16	Job. v. 20

FEBRUARY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
4 Jesus in Galilee.....	Matt. iv. 12—25...	Ver. 28
11 The Blessed Life.....	Matt. v. 1—16.....	Ps. cxii. 1
18 The Law and the Gospel	Matt. v. 17-24, 38-48	John i. 17
25 Giving and Praying	Matt. vi. 1—16....	Phil. iv. 6
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
4 Elijah and Ahab.....	1 Kings xviii. 1-16	Ps. cxix. 46
11 Elijah and Baal's Prophets	1 Kings xviii. 17-29	Ver. 21
18 Elijah's Sacrifice.....	1 Kings xviii. 30-46	Ver. 24
25 Elijah at Horeb [.....	1 Kings xix. 1-18	Job. xxiii. 6

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

SCRIPTURAL ENIGMA.

1. The river by which a girdle was hid.
2. The river by which a prophet had a vision.
3. What city did Baasha build?
4. Under what was Deborah buried?
5. Of whose house was Nabal?
6. What was the name of Rebekah's brother?
7. In what period of life is it said that hypocrites die?
8. Of what tribe was a cunning workman and embroiderer of fine linen?
9. Whom does Paul call a faithful and beloved brother?
10. Who was the daughter of Elnathan of Jerusalem?

The initials of the answers form the name of a tempestuous wind.

The award of the prizes will be announced in the INSTRUCTOR for February.

TABERNACLE SUNDAY SCHOOLS, OLDBURY.—DEAR SIR,—We held our Annual Juvenile Missionary Meeting on Sunday evening, April 30th, in our chapel. The meeting was presided over by Mr. Samuel Nightingale, junior, who made a few encouraging remarks. The secretary read the report, after which addresses were delivered by the Rev. T. T. Rushworth, T. Currie, and J. Pardoe. Pieces were recited by several of the Sunday-school scholars. The meeting was enlivened by the children and choir sweetly singing several of Messrs. Moody and Sankey's hymns. The following is the amounts collected on cards:—Mary Ann Crumpet, 1s.; William Franks, 1s.; Benjamin Skidmore, 1s. 1d.; Thomas Matthews, 1s. 4d.; Priscilla Clift, 1s. 8d.; A Friend, 1s. 8½d.; Jacob Hatton, 1s. 9d.; Maria Millward, 1s. 9d.; Sarah Bagnall, 2s.; George Werthen, 2s.; Elizabeth Darby, 2s. 5d.; Alfred James Holloway, 2s. 6d.; Louisa Grigg, 2s. 9d.; Edward Millward, 2s. 9d.; William H. Prescott, 3s. 1d.; Joseph Rose, 3s. 2d.; Lizzie Preston, 4s.; Arthur Platt, 5s.; Keziah Ray, 5s.; Robert Sabin, 5s.; Elizabeth Skidmore, 5s.; Annie Holland, 5s.; Edward Holloway, 5s. 6d.; Joseph Alex. Armstrong, 7s. 1d.; Mary Alice Saul, 6s.; William Robinson, 7s. 9d.; Miss Emma Baker and Miss Maria Butler, 13s.; Miss Kate Parkes and Miss Fanny Sturges, £1 6s.; Collection in School, 17s. 2½d.; sums under one shilling, 4s. 10d.; additional efforts, £6 7s. 6d. Total, £13 15s. 10d. Collection at meeting, £7 14s. 2½d., showing an increase altogether of about 5s. 2d. You will see by the above report that success has attended our efforts during the past year, and hoping that this will encourage us to be more vigorous in the future,—I remain, yours truly, J. OSBORNE, Secretary.

HIGH TOWN, NEAR CANNOCK.—Our mission services were held November 12th by the Rev. T. Porteus, and £1 5s. 7½d. was collected. There has also been collected by cards:—Esther Pitaway, 6s. 9d.; Clara

Platta, 5s. ; Ellen Hill, 4s. 6d. ; Sarah Ann Kent, 2s. 11d. ; Epsy Tarling, 2s. 6d. ; Elizabeth Moreton, 2s. 6d. ; Emma Jane Culling, 1s. 9d. ; Sarah Barnes, 1s. Total of cards and collection, £2 12s. 6½d.—WILLIAM JAMN.

PUDSEY.—We held our Annual Juvenile Missionary Meeting on Sunday afternoon, October 22, when our esteemed superintendent, Mr. Samuel Lee, presided, and with his address created at the beginning a good feeling, which was maintained throughout. Recitations and dialogues were beautifully given by Miss Mary Fearnley, Hannah Mary Glover, Jane Ann Rhodes, Clara Glover, Mary Hannah Hinchliffe, and Anna Brown. The Rev. W. Wilshaw gave us an excellent address on "Modern Missions," more particularly on our own missionaries in China. The choir was in attendance, our schoolroom was filled with a respectable congregation, and altogether we had a good meeting. We are also glad to report an increase on last year of £3. The following is the result of our young friends' efforts at Pudsey:—Elizabeth Glover, £2; Margaret A. Hinchliffe, £1 16s.; Sarah Ann Shoemith, £1 5s. 7d.; Mary Fearnley, 19s. 4d.; Emma S. Salter, 15s.; John W. Turner, 13s.; Sarah Walker, 9s. 1d.; Mary H. Hinchliffe, 7s. 5½d.; Martha Pearson, 5s. 3½d.; Elizabeth Walton, 5s. 2d.; Rosetta Lumby, 4s. 3d.; Esther Ackesoyd, 4s.; Mary E. Pearson, 3s. 8d.; Willy Webster, 3s. 1d.; Margesson Stott, 3s.; John Glover 2s. 9d.; Ellen Hinchliffe, 2s. 7d.; George W. Graves, 2s. 8d.; smaller sums, 8s. 7d.; public collection, £1 8s. 7d. Total, £11 18s. 8d.; less expenses, 18s. 8d.; paid over, £11. May He who first gave the commission to go and preach the Gospel to every creature crown all our efforts with abundant success.—JOSHUA SHOEMITH, Secretary.

BERRY BROW.—We held our Annual Juvenile Missionary Meeting on the afternoon of Sunday, May 7th, 1876. Mr. Matthew Bradley occupied the chair, and the chapel was moderately full. Short addresses were delivered by the Rev. J. K. Jackson, of Laidley, and Messrs. O. Edwards and T. Taylor of our own school. Our young friends enlivened the meeting by reciting dialogues and other pieces in a very creditable manner. Dialogue on "Missions," by H. Crossley and Tom Woodhouse. Recitations were rendered by Helena Whiteley, "Communion;" Sarah Hardcastle, "Your Mission;" Ann Banks, "The Best Use of a Penny;" Mary Houlgate, "The English Child;" Harriet Beecher Dawson, "The Child's Lesson." At the close of the meeting, which was of an interesting character, a collection was made, which amounted to £1 0s. 9d. The following sums were also collected:—Laura Jessop, 11s. 8d.; Helena Whiteley, 11s.; making a total of £2 3s, being a little more than last year. May our young friends be encouraged from this to persevere.—H. GLEDHILL, Mission Secretary.

ATTERCLIFFE, SHEFFIELD.—We held our Juvenile Missionary Meeting in our chapel on Sunday afternoon, December 3, 1876. There was a moderately good attendance. We were successful in securing the services of one of the students of Rammoor College, Mr. G. Parker, who was planned to preach at our chapel morning and evening, and who willingly consented to preside over our meeting in the afternoon. In the efficient manner in which he conducted the meeting, we have promise that if God spares his life he will be an ornament to our Connexion, and a workman that needeth not to be ashamed. The report, read by the secretary, Mr. Benistone, showed that our Missions are still progressing. The

sums of money collected by our young friends, I think, very encouraging, taking into account the great depression in the whole of the Sheffield trades, and the short time they have been collecting—only five weeks. The following is the result:—Matthew Benistone (collected from annual subscribers), 17s. 4d.; Hannah Frith, 8s. 10d.; Miriam Hazlehurst, 10s. 8d.; Florence Parker, 5s. 4d.; Florence Beardshall, 3s. 4d.; Charles Edgar Cooper, 10s. 3d.; Samuel Frith, 8s.; Daniel Mattison, 7s. 2½d.; John C. Seager, 6s.; Percy J. Austin, 5s.; William Smith, 5s.; Edwin Rowley, 4s. 8d.; William H. Swann, 3s. 10d.; Henry Castle, 6s. 8d.; W. Austin, 3s. 4½d.; William Robinson, 1s. 9d.; Samuel Webster, 1s. 1d.; Henry Mustill, 1s. 7d.; James White, 1s.; William Taylor, 1s. 4d.; James Ibbotson, 6d.—£5 11 3d.; public collection, £1 = £6 11s. 8d. Expenses, 3s. 8d.; leaving a total of £6 8s., being an increase of £1 12s. 8d. upon last year. After the reading of the report, addresses were delivered by Messrs. G. Menills, A. Shepherd, and G. Turner. The first of the three speakers spoke with much earnestness upon the importance of sanctifying ourselves to God for the sake of others. The other two speakers gave their maiden speeches, it being their first attempt to speak upon a missionary platform. They did well. The first spoke upon the Bible—what it has done in our own land and is doing in other lands, &c.; and the last speaker spoke upon the work and the trials of the missionary. Also two of our scholars recited pieces—Samuel Frith, “The Missionary’s Resolve;” and Daniel Mattison upon the “Mission Cause.” The meeting was a very pleasing and instructive one, and was enlivened during the intervals by appropriate hymns. We are looking for greater success in the future. Our young friends need not be discouraged; they must persevere. We ought, as our chairman suggested, to take a special interest in mission work, knowing that our beloved missionaries in China, Mr. Hall and Mr. Innocent, were scholars and local preachers in our Circuit. May we imbibe more of the missionary spirit, and help our noble-hearted brethren in realizing their cherished hope—“China for Christ.”—W. RATLEDGE, Treasurer.

BROWNLOW FOLD, BOLTON.—Our Juvenile Missionary Meeting was held on Sunday afternoon, December 10th, 1876. Addresses were delivered by Mr. Mullineux, chairman; the Rev. T. Smith, superintendent minister; Mr. Salmon, missionary; and Messrs. Melling, Harding, and Hampson. This was the most successful Juvenile Missionary Meeting ever held in this place. The children had entered heartily into the work, and collected £8 2s. The collection at the meeting amounted to 13s. 8d., including fifty-six farthings. W. S.

A LITTLE BOY.

As a little boy was paring an apple which had been given to him after dinner, the following question was put to him by a lady: “Supposing God were to tell you He would give you whatever you chose to ask Him for, what would you ask Him to give you?” “Do you mean to eat?” inquired the little boy. “No,” replied the lady; “I mean of all things you can think of that you like, what would you ask Him for?” The child laid down his apple, and seemed for a few seconds to be lost in thought, then looking up at the lady, he answered, “I would ask God to give me a new heart.”



SPRING FLOWERS.

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SPRING FLOWERS.



THE love of flowers is a sentiment common alike to all. They are the delight of our childhood, while we cherish them in youth, and admire them in declining years. But perhaps it is the early flowers of Spring that always bring with them the greatest degree of pleasure. Our affections seem to expand at the sight of the first blossom under the sunny wall or sheltered bank, however humble its race may be.

Why it should be so is easy to understand. "It is our first meeting with a long-lost friend, the reviving glow of a natural affection, that so warms us at this season. To maturity flowers give pleasure, as the harbinger of the renewal of life; to youth they are an expanding being, opening years, hilarity, and joy; and the child, let loose from the house, riots in the flowery meads 'monarch of all he surveys.' There is not a prettier emblem of Spring than an infant sporting in the sunny field, with its osier basket wreathed with buttercups and daisies. With summer flowers we seem to live as with neighbours, in harmony and good order, but spring flowers are cherished as private friendships."

The gift of flowers is a very striking proof of the Divine goodness. As Mary Howitt has sweetly sung :

"God might have made the earth bring forth
 Enough for great and small;
 The oak tree and the cedar tree,
 Without a flower at all.
 He might have made enough—enough
 For every want of ours,
 For food, and medicine, and toil,
 And yet have made no flowers.
 Our outward life requires them not,
 Then wherefore had they birth?
 To minister delight to man,
 To beautify the earth.
 To whisper hope, to comfort man,
 'Whene'er his faith is dim;
 For He who careth for the flowers,
 Will much more care for him."

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of "A Year at School," &c., &c.*

Letter No. 4

From BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
Jan. 22nd, 187—.

DEAR CHARLIE,—

I could not write to you yesterday, for we were out sliding until it was too late. I promised to tell you about Dr. Tasker. When I got here, Stilts—that's Mr. Henley, you know, left me in the library—a room full of books from the floor to the ceiling. Ted Instone—one of the fellows who sleep in the same room with me—told me that one of Mr. Henley's duties was to reach down the books from the top shelves when the doctor wanted them. Perhaps he does reach them for him if he happens to be there, but he needn't, for I saw a little ladder hanging against one of the shelves.

Dr. Tasker came into the library to see me. I was a bit disappointed. Father always said what a fine man he was; but he is really very short, and goes a bit lame with one foot. Of course he is getting very old now, but I should think he was never much good at football or cricket. He seems a very pleasant man. I haven't heard him talk in Latin or Greek yet. I suppose it is because he knows I could not understand it.

And now about the boys. There are about forty of us, and quite half are bigger than I am. I am in the fourth class, and in that there are three or four fellows a lot bigger than me, but I don't fear them much. They look rather loose-jointed, like George Waadell, so I think I could hold my own against either of them. There are four boys sleep in the same room with me, but we have a bed each. One of the rooms has six beds, and some of the little chaps sleep two together.

Ted Instone is a jolly sort of fellow. I like him better than anyone else. But he's so full of jokes that you never know when he is in earnest.

Of course I have been played all sorts of tricks. The first night the other three lads in our room undressed in a great hurry and put out the light before I was ready for bed, and when I tried to get in I found the bed was almost full of things—fire-irons, books, boots, and hairbrushes, and when I had got them out I found the sheet was doubled up and fastened, so that I could only get down halfway into bed. Ted came and made a great fuss in helping me, but I believe he kept putting the things in again at one side as fast as I fetched them out at the other, for I should think I fetched one hairbrush out a dozen times.

Last night Ted advised me to go up stairs like him on tiptoe and without a light, for fear the other fellows might know we were coming and play me some pranks. I did as he said, and there, directly I entered the room, my foot caught against a piece of string stretched across a doorway, and I was pitched head first into a tin bath full of cold water they had put ready for me. It wasn't nice, I can tell you, but father said I must not lose my temper, or they would be ten times worse, so I kept my tongue still.

Don't tell anybody about the tricks I've been played—except Joe Bland, I don't mind him. Wait until I've had a chance of paying them back, and then you can tell anybody.—Yours truly,

BENJAMIN BARLOW.

Letter No. 5.

From Dr. BARLOW to BEN BARLOW.

The Laurels, Woodbourne.

Jan. 23rd, 187—.

MY DEAR BEN,—

You will get your skates to-morrow morning. Your mother knows they are coming. I persuaded her to let you have them by promising for you that you would keep out of danger. Now, mind, I have pledged my word for you. I know the place well, and if you keep on the meadow side of the pollard willows you cannot get anything worse than a wetting even if the ice breaks.

Charlie Thornton called here this morning to see Bob about something. He told me you were a little surprised to find Dr. Tasker a little, lame man. When I said he was a grand, fine fellow, I referred to his moral and intellectual qualities. When you know him better you will understand my meaning. But though he was never tall, I can remember him a strong, active man. He was one of the first ears at his University. Some time I may tell you, if you wish to know, how the doctor became lame.

And now, Ben, I hope you will do your best at school. Your mother asks me to warn you against taking cold, or getting hurt in your games. If you get wet, mind and keep on the move till you get back to the school, and then instantly change your wet garments for dry.

You won't forget the three rules I told you to go by at school:—Learn all you can—fear nothing but lying—do unto others as you would have them do to you. You will find them hard work, especially the last, but pray earnestly night and morning for help, and they will become easier.—With love from mother, sisters, and self, believe me, your affectionate father,

OLIVER BARLOW.

P.S.—You may tell your friend Instone that I am quite satisfied when you sign yourself "affectionate son," for true affection will be sure to make you dutiful.

Letter No. 6.

From "BOB" to BEN BARLOW.

Jenury 25, 187—.

DEER MASTER BEN,—

I rite these feu lines 'oping to find you in good health, as it leeves me at present with a soar throate.

You will like to know that the gray rabit 'as got 6 little wons. They are a very strung sort, and I can sell all of 'em if you like. Or Master Blunt will take 3 of 'em for two of those bleu wons wich you wanted so much. Let me know wich I am to do.

I hope you like your neu school. So no more at present from your obedent servant,

BOB.

The writer of the above letter was named "Bob," and that only. He had never borne any other name. Who his father was, was never known. He was born in Upleigh workhouse, whither his mother had taken refuge a few days before. Whence she came, or who she was, she never told, but it was feared the unfortunate woman was the victim of misplaced affection. A few days after the birth of her baby it became evident the poor woman was fast sinking. In her last moments Dr. Barlow, then a young man, and newly appointed pariah doctor, inquired if she wished to give any information as to his parentage. She sadly shook her head, asked him to have the baby named Robert, and shortly afterwards died.

Bob stayed in the workhouse till he was ten years of age, and then Dr. Barlow getting married, took him into his house as errand boy. Since then he had faithfully served his master and mistress, from both of whom he received the kindest and most considerate treatment. He had received some tuition, and though from want of practice he was a poor writer and an eccentric speller, he was able to read very fairly indeed. When the good doctor set up a horse and gig, Bob was installed as groom, and he soon became quite expert in his new duties. His love for animals made him almost as fond of pets as his young master, and formed a bond of friendship between them, though he was nearly ten years older than Master Ben.

His obscure origin rarely troubled Bob, nor the want of a surname. Dr. Barlow had advised him to call himself after the place of his birth, Robert Woodbourne—quite a stylish name, by the way—but workhouse orphans are rarely called upon to sign very important documents, and Bob had hitherto been content with that very short name.

Letter No. 7.

From TOM BLUNT to BEN BARLOW.

Old Mill, Woodbourne,

25th Jan, 187—.

DEAR BEN,—

Bob told me yesterday that your grey doe had got young ones, so I went to see them. Are you for a deal? If you are, I will "swop" two of my missionary rabbits—the blue ones, you know—a month old for three of them. You know mine are "stunners."

Bob promised to write, but I was afraid he might forget, so I popped down to Thornton's and got your address from Charlie. Has he told you what a game we had on the pond on Saturday afternoon?

I have got my home lesson to do yet, so I must wind up.—Yours truly,
TOM BLUNT.

Tom Blunt, the miller's son, was an eager impulsive lad of fourteen, good-hearted, good-tempered, and brimful of energy. He was, however, neither thoughtless nor careless. No boy in Woodbourne was a better hand at dealing, and few made so many or such good bargains as he. He was nearly always buying, selling, or changing something or other, and he rarely lost in the transactions.

His father's mill-yard contained a number of outhouses which were but rarely used, and in several of these he allowed Tom to keep and rear his many varieties of live stock; and of course he got their food—damaged grain, meal, and such like—for nothing. He kept several kinds of doves and pigeons, a great variety of bantam and guinea-fowls, white mice, and guinea-pigs; and he occasionally bought a hedgehog, weasel, or leveret when one was captured near the village.

But of all his live stock, Tom was most proud of his rabbits. We cannot say how many he had, for the fact is he never knew exactly himself. Like the Irish pig-drover, Tom would have wanted somebody to hold them still while he counted them. Part of them he kept in an old stable, along one side of which was ranged a row of large hutches of his own construction. On the opposite side of the yard was a disused granary which contained another set of rabbit pens. Between the two, Tom had made an underground passage with some very wide drain pipes his father had taken up from another part of the premises. And so on a wet Saturday, or at any other time when he wished it, Tom opened the hutch doors in both stable and granary, and the white-tailed tenants frisked about, and passed and repassed one another in the subterranean passage on friendly visits to their neighbours.

Of all Tom's lop-eared treasures, the most prizeable were his missionary rabbits—a breed of great rarity. Their colour was that slaty-gray hue which fanciers persist in designating as blue. They

came to be called missionary rabbits in this way. Mr. Blunt was one of the principal Methodists of the village, and at one of their missionary meetings much was said about what boys and girls could do to help the cause, and one speaker told the story of the missionary apple-tree. This set Tom Blunt thinking, and he at once decided to have some missionary rabbits, and so full was he of zeal that he resolved to start with a fine blue doe which he had bought that very week at a great outlay of pocket-money. When this rabbit had young ones, Tom sold some of them and put the money in a box; and as they were much sought after, he found he had by the next yearly meeting nearly two pounds for the missions. He carefully kept all the produce of these blue rabbits for the same fund, and if he changed any of them for others, he always deposited their market price in the missionary box just as if he had sold them.

What made Tom so anxious to deal with Ben Barlow was the fact that the mother of Ben's rabbits had taken first prize at a competition. His uncle had bought it for Ben for a birthday present, and it was indeed a beautiful specimen of the grey, double-lopped species.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XII.—THE LION.



DETAILED sketch of the more remarkable and important animals will show numerous traces of beneficent design. Striking adaptations of means to ends will appear; and as we realise the goodness and wisdom and power that designed and created them, these adaptations will serve far better than mere word-strife

or argumentative displays for giving us correct thoughts of the Creator. In the structure and habits and instincts of the various animals we shall see such skill and contrivance as will expand our mental vision, and give us that most valuable of all knowledge—the knowledge that deepens our reverence, and increases our love to God.

“Whate’er we see,
Whate’er we feel, by agency direct
Or indirect, shall tend to feed and nurse
Our faculties; shall fix us in calm seats
Of moral strength, and raise to loftier heights
Of love divine, our intellectual souls.”

The first animal we must speak of is manifestly the lion. He is commonly called the king of beasts, and is treated with universal respect. Though not the largest, he is probably the most powerful

animal, and he is, besides, of a most magnanimous disposition. We have heard, indeed, lately numerous stories of the cowardice of the lion; but it must be remembered that in unnatural confinement his character often swiftly degenerates. Take him in his native grandeur, as he roams the African wilds, and a nobler beast is not to be seen in the forests. His natural home is in the torrid zone, and he deteriorates when removed from it, just as we might suppose a healthful and high-spirited peasant who breathes the bracing air of the hills would soon dwindle both in body and mind if transferred to the close courts and stifling air of a crowded city. A full-sized African lion will measure from eight to nine feet from head to tail, and will stand about four feet high. The majestic head, the fire-flashing eyes, the shaggy mane, the lithe and muscular limbs of the king of the forest, make him an imposing spectacle. Strength and activity and beauty are all combined, and there is no other animal who possesses these characteristics in an equal degree. His huge teeth, worked by powerful jaws; his tongue, covered with a horny rasping substance, something like a coarse file; his forelimbs, measuring often as much as eighteen inches in circumference, and capable of giving a blow comparable to nothing so much as the stroke of a steam-hammer; his limbs and teeth, perfectly subservient to an immensely strong muscular constitution, make him an ugly customer to contend with in a pitched battle. A full-grown lion will seize a heifer and carry it off with as much ease, and probably as much satisfaction, as a cat will pounce upon a mouse and retire to a quiet corner to devour it. He is agile in all his movements, and can leap as much as twenty feet at a single bound. His foot is as soft as velvet, but conceals claws that when vigorously used can tear furrows an inch deep in the thick hide of a buffalo. He is perfectly noiseless when hunting his prey, and moves along as quietly as his own shadow. The ingenious mechanism in the feet that secures perfect noiselessness of tread answers at the same time another important purpose, and preserves his claws sound and sharp and ready for business. His quiet motion is very much aided by certain feelers or whiskers that grow on the sides of the mouth, and, communicating with a highly sensitive substance, give speedy intelligence of everything they touch. In crawling through the woods he can find his way by the use of his whiskers alone, and may use his eyes entirely for the purpose of searching for or following his prey.

The female lion is rather less in size than the male, and has no mane. But she is not inferior in intelligence, for as the main duty of watching over her cubs falls to her, she frequently manifests traces of instinct, or of understanding even, of a high order. For example, to prevent her tracks leading her foes to the den where her little ones are hid, she is frequently known to walk backwards and forwards, placing her feet in every track she had made, so as to obliterate any notices of the direction she had last taken. Sometimes again she will sweep the ground to and fro with her tail, so as to leave

behind her no footprints at all. The lion is nocturnal in his habits, seeking his food by night and invariably returning to his lair by sunrise. During the day he either sleeps in his den or basks in the warm sunshine, and to see him by daylight is to see him at a disadvantage, when he has not half his wits about him.

Not unfrequently lions are to be found in troops of from six to nine. Travellers tell of a very cunning method they adopt in South Africa, where, by reason of the large plains, they sometimes meet with a difficulty in securing their prey, and feel in consequence the sharp pangs of hunger. One of these parties will divide; a few crouching down under cover at a little distance from each other, the rest circuitously going a considerable distance from them, but always up the wind. When the latter have got a mile or two from their companions, they make an impetuous charge down the wind, with that terrific roar which, heard in the night and re-echoed by the distant hills, sounds almost like thunder. In frantic haste away rush the herds, and losing their usual caution they become an easy prey to the formidable ambuscade patiently waiting for them. The power to lay plans and act in concert indicates the high place they hold in Nature. Men they generally avoid—the only being of whom they show any fear—but when driven to extremities by hunger, a single lion has been known to attack an entire caravan.

Many stories of their intelligence and affection are told. A lion in the Dublin Zoological Gardens, that had grown very old and feeble, was greatly annoyed by the rats who boldly entered the den when they found they could do it with impunity; they actually had impudence enough to crawl over his majestic person, and when they could not get enough of his food, nibbled at his extremities. To drive away the rats the keeper put a terrier in the den. The presence of the dog was a great outrage on the lion, who plainly manifested every mark of intense aversion. One day, however, the lion saw the terrier in the very act of catching and worrying a rat. It became thoughtful and reflective at once, and narrowly observed the actions of the dog until another rat met with a similar fate. The reason of the dog's presence seemed to be suddenly understood, and from that moment the dislike was converted into strong affection. It fondled the terrier with its paws and tongue, it showed every sign of gratitude, and the pair lived together, as the story books say, "happily ever after." At Birr, in Ireland, in 1839, a keeper of wild beasts having fallen accidentally upon a tiger while in its cage, the tiger seized him by the thigh in the presence of a number of spectators, but a lion in the same compartment rose up in a rage, and, furiously attacking the maddened tiger, compelled him to let go, and thus saved the life of his friend the keeper. Quite a number of authentic instances might be given of lions having spared the lives of human beings thrown to them to be devoured. Punishment by wild beasts was reserved by the Romans for those they accounted guilty of the worst crimes. This

was their favourite method of showing their hatred to the Christians, and though sword, and fire, and crucifixion, and ponds full of hungry fishes were at their command, they devoted many Christians to be devoured by hungry lions, believing this to be the most painful possible death. Ignatius, Bishop of Antioch, one of the noblest of the Christian martyrs, was sentenced by the Emperor Trajan to this punishment. But instances are on record in which the noble beasts actually refused to do the cruel work set them. On one occasion a runaway slave was cast into the den of a hungry lion, and, to the astonishment of the spectators, who anticipated the same kind of amusement that brutal men take in the sports of the rat-pit, the slave and the lion behaved towards each other with the mutual affection of a dog and his master. A while before, this slave had hid in the very den of this lion, and the noble beast, made tame by his pain, had suffered him to extract a huge thorn from the soft ball of his foot. It would seem as if sometimes, while brutal ferocity entered into the human heart, human compassion found expression by savage beasts of prey.

Lions often contributed to the barbarous sports of the Romans, who delighted in everything of the nature of a race, or fight, or competition. A combat of lions was an ordinary attraction of the theatre, and especially a combat between lions and condemned criminals. The Colosseum was built by Vespasian for these cruel displays—a huge building, of an oval shape, capable of accommodating ninety thousand spectators. Pompey, it is said, kept six hundred lions for the purpose of this cruel sport.

The lion has always been regarded as the emblem of power, not only among the Hebrews and the various pagan nations of the old world, but also amongst many nations who have flourished during the Christian era. Other nations have as their emblems the eagle, the cock, the bear, but the national ensign of England is the lion in all his beauty, and activity, and courage. In the twelfth century the lion was in great favour, for he held a leading position on the coat, armour, and war standards of the kings of England, Scotland, Denmark, and several of the wild princes of Wales. The lion was the standard of the tribe of Judah and its kings, who were valiant, courageous, and terrible to their enemies. From its being the noblest of beasts it is an ordained metaphor of strength and valour. Hence such passages as Prov. xxviii, 1, "The righteous are bold as the lion." The heart of the valiant is said to be "as the heart of a lion." It is elevated into a figure by which the mighty and invincible power of Christ is expressed—"The lion of the tribe of Judah is mighty, and hath prevailed." Most of the Scriptural allusions to this noble beast are full of poetic grandeur. "The lion hath roared, who will not fear?" "Wilt thou hunt the prey for the lion? or fill the appetites of the young lions when they couch in their dens, and abide in the covert to lie in wait?" "Thou makest darkness, and it is night, wherein the beasts of the forest do creep forth. The young lions

roar after their prey, and seek their meat from God. The sun ariseth, they gather themselves together, and lay them down in their dens." The opinion seems favoured by the Scripture, and is certainly warranted by an inquiry into his habits and nature, that the lion is, next to man, the noblest creature made by God, and in his structure, and intelligence, and activity we behold many marks of the surpassing wisdom of the Creator.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

II. NATURAL PRODUCTS—GOLD.



GOLD is the heaviest of the metals, with the exception of platinum, being rather more than nineteen times heavier than water. Native gold, in most cases, presents the characteristic yellow colour peculiar to this body when in a state of purity; but its natural surfaces in other instances require to be rubbed with some hard substance before they assume the ordinary appearance of manufactured gold. Gold is not so hard as iron, copper, or silver, but is harder than either lead or tin. It is extremely tough or tenacious; but when broken by repeated bendings it presents a fibrous, silk-like structure, which is more or less fine in accordance with the purity of the specimen. Gold is extremely malleable, so much so that one grain of it may be beaten out into a leaf having a surface of fifty-six square inches, and of which the thickness is only one two-thousandth part of an inch. When reduced to very thin leaves, gold is to a certain degree transparent, and on being held against the light appears of a beautiful green colour. In addition to its malleable character, it is remarkable for its great power of divisibility. A grain of gold has been found by *Muncke* to admit of being divided into *ninety-five thousand millions of visible parts*—that is, by the aid of a microscope magnifying one thousand times. A sovereign is thus capable of division into ten millions of millions of visible particles, being ten thousand times as many such particles as there are men, women, and children in all the world. Gold is not dissolved by any of the pure acids, but a mixture of hydrochloric and nitric acids will dissolve it, in consequence of giving out chlorine, an element which freely dissolves gold. As a conductor of heat gold is the best of all metals, silver being the next, and copper the next.

ITS SOURCES.

Gold is invariably found in the metallic state, but is never quite pure, and usually contains a certain proportion of silver, and not

unfrequently iron. Geologists tell us that this precious metal is almost entirely found associated with some of the older stratified rocks, and as these constitute the subsoil of but a comparatively small part of the world gold is not to be looked for over very wide areas. It occurs in lodes or veins, in laminae or thin scales, among the detritus of the old rocks, and mixed with quartz rock in such a way that, mineralogically, it is to be looked upon as having been laid down at the same time with the quartz. It is sometimes found in pure nuggets, seldom in very large masses. Nugget gold has generally the appearance of having been melted. Gold in recent workings is described "as resembling drops of metal poured into sand, the indentations being visible even upon the smallest particles of the gold when microscopically examined." These indentations may be observed in most specimens. Job speaks of the "place where they fine it," evidently referring to the work of washing or crushing, to separate the ore from its natural bed. This is by no means an easy task; the mixture of quartz pebbles with the auriferous ore earth rendering it very tenacious and difficult to wash. Gold is found in most hot countries—the East Indies, Brazil, New Mexico, and North America, in the Ural Mountains, California, Australia, the north-eastern border of Europe, in parts of Russia, and also in the sand of rivers in Africa. The principal gold mines in Europe are those of Salzburg and Hungary. The British Islands also furnish from time to time small quantities of gold, although seldom in sufficient quantities to be equivalent to the cost of procuring it. The principal localities in which gold has been found in the United Kingdom are in Ireland and Wales, although specimens are occasionally obtained from the Cornish stream-works, and from the district of Lead-hills in Scotland, where, in the time of Elizabeth, extensive washings were carried on for this metal. Specimens of native gold have also, at different periods, been procured from various parts of Devonshire. Gold likewise occurs in Cumberland, in Lanarkshire, and at Glen Turret, in Perthshire. In Ireland a considerable quantity of native gold was accidentally discovered, towards the close of the last century, disseminated in the beds of the stream which flows from the northern flank of Croghan, Kinshela, on the confines of Wicklow and Wexford, and in the immediate vicinity of the granite and clay slate. This gold was chiefly found in massive lumps, one of which weighed nine, another eighteen, and a third twenty-two ounces.

THE USES OF GOLD.

We discover the practice of working in gold soon after the rise of the arts. The golden earring presented by Abraham's steward to Rebekah weighed half a shekel, and the two bracelets for her hands were ten shekels' weight of gold. The ark of the covenant, though made of wood, was to be overlaid with pure gold, within and without. It was also to have a crown of gold round about, and rings of

gold in the four corners. Even the staves were to be overlaid with gold. Similar directions were given as to the table of shew-bread and the altar of incense. And Soloraon garnished the house of the Lord with gold.

The Egyptians appear to have been familiar with the manufacture of gold. The gold leaf still found in and about mummy-cases, some thousands of years old, proves not only that they had an abundant supply of the precious metal, but were acquainted with the art of gilding. Their making of golden ornaments and golden vases, of large size and beautiful workmanship, might be inferred from various incidental notices in ancient writers; but it is placed beyond all doubt by the representations of Rosellini. Among these are numerous vases of a golden colour, many of them showing not only manual dexterity, but also considerable taste. A picture in the tomb of Rameses IV. contains a golden vase of great beauty, supported by two Philistines. In addition to the above and other ornamental purposes, gold is extensively used, in the form of coin, as the medium of exchange. The people of Asia undoubtedly possessed gold money from an early age. The few remaining gold coins of Greece appear not to have been struck until the age of Alexander the Great. But on the rise of the Macedonian Empire gold coins became plentiful through the country.

Gold was first coined in Rome B.C. 207. The common size of their pieces was probably about the same as that of our sovereigns; but some existed in size only one quarter of our half-sovereigns, and representing about 2s. 6d. in silver. Gold coin contains about one-twelfth part, by weight, of copper, which is added to give it hardness, and consequently renders it more durable.

Before gold is ready for the above uses it has to be thoroughly purified and rendered soft. This is done by placing it in a white-heat furnace. When the metal has been sufficiently subjected to the heat, all the dross appears on the surface, which the refiner carefully removes. From this refining process gold receives no injury whatever. Pure gold is so fixed that *Boerhave* says, "An ounce of it set in the eye of a glass furnace for two months did not lose a single grain." Well will it be for the "thoughtful boys" or others who read this paper, if in that day when their work is "tried as by fire" it be found to stand the process even as the pure gold.

Gold is ever regarded as one of the "precious" things of the earth. But there is something yet more precious. When the sorrow-stricken "man of Uz" got a bright glimpse of the excellency and beauty of that wisdom whose highest fruit is the fear of the Lord, and whose chief influence is to depart from evil, he felt that all the precious things of the earth were as nought compared with it, because they cannot secure it to a single soul. "It cannot be gotten for gold, neither shall silver be weighed for the price thereof. It cannot be valued with the gold of Ophir, with the precious onyx, or the sapphire. The gold and the crystal cannot equal it: and the exchange of it shall not be for jewels of fine gold" (Job xxviii., 15-17).

Precious, then, above gold, and above rubies and precious stones, is wisdom. "Get wisdom, and with all thy getting get understanding."

Wisdom Divine ! who tells the price
Of wisdom's costly merchandise ?
Wisdom to silver we prefer,
And gold is dross compared to her.

Happy the man who wisdom gains,
Thrice happy, who his guest retains ;
He owns, and shall for ever own,
Wisdom, and Christ, and Heaven are one.

OUR SUNDAY SCHOOL ALBUM.

BY ENOCH GRATTON.

(Continued from page 15.)



HE next figure that meets our gaze in turning over the pages of our Album is that of—

IV.—MR. STORM, THE EXCITABLE AND FIDGETY SUPERINTENDENT.

He is not without some good qualities in the depth of his heart, but on the surface there is often too much foam and fury. A little thing will put him into a stew. It is true he soon gets out, but it is none the less true that he is soon in again. The visits of the furies are not few, neither are they far between. When others are calm and cheerful, he is as cross as though he was being shaved with a dull razor, or as if he were a child cutting its double teeth. How often I have heard him say that he "wants order, that he *will* have order," and to get order he thumps the Bible and desk, stamps, and shouts, and rings, and threatens ; but order does not make its appearance. It might be some spirit he was trying to call up from the vasty deep, or some timid, quiet creature that was running away, and that ran all the faster the more Friend Fidgety shouted and screamed. Poor man ! he ought ere this to have known that order was not to be *thus* secured. Look at his face. Discontent is on his brow, anger in his eye, a kind of childish pout is upon his lips. Watch his movements ; dashing about here and there, upsetting stools or benches, running against scholars and teachers, sweating and bustling. Listen to his voice, in excited tones he says, "I will stand it no longer ; I will give up and leave the school," and some of the teachers are wicked enough to wish that he would either leave the school or learn to rule his own spirit. Our friend did leave the school ; but he did not find true repose even then, nor will he, till he more fully learns of Him who is "meek and lowly in heart."

Rest is not quitting the busy career ;
 Rest is the fitting of self to its sphere.
 'Tis the brook's motion—clear without strife ;
 Fleeing to ocean after its life.

Deeper devotion nowhere had knelt ;
 Fuller emotion heart never felt.
 'Tis loving and serving the highest and best.
 'Tis onwards! unswerving—and that is true rest.

The next "carte" is that of—

V.—MR. DO-IT-WELL, THE EXCELLENT TEACHER.

His excellence does not depend upon any one single quality, but upon a cluster of sterling and noble virtues. It is not a matter of rank, or polish, or wealth, but of intelligence, efficiency, and love—love that does not wax cold—love that burns, and flames, and inspires him with a glowing enthusiasm, that makes him a burning and shining light in the Sunday school. If it be at all possible, he is always at his post, and he is at in time. When he reaches it he has something to say, and, better still, he knows how to say it, and *when* and *why*. While Mr. Prosy is spinning his long yarn amid a yawning, restless class, and Mr. Stady-Little is offering again and again the same stale and mouldy crusts to the hungry souls of his scholars, Mr. Do-it-Well is pouring forth fresh and living truths in simple and winning words, which words the lads drink in with eager and delighted hearts. His lesson has cost him something. It has cost him careful reading, close reflection, fervent prayer, and brave self-denial. It is said that the arrow of the huntsman is sure to hit the mark if it has first been dipped in the huntsman's blood. Well, our friend first dips the *truth* in the life-blood of his own soul, in depths of sympathy, solicitude, and thought. It is not a message spoken simply from the throat outward ; it wells up from the unsealed and sacred fountains of love, knowledge, and purity.

The boys are passionately fond of this wise and manly instructor ; the superintendent sets an unspeakable value upon this energetic helper, and the school generally delights to look at this cheery, sunny-faced man, who, in mind, strength, and devotion stands head and shoulders above many of his fellow teachers.

He not only *means* well and *says* well—he *does* well. He works cheerfully, heartily, and efficiently. After his conversion, his first prayer was, "Lord, what wilt thou have me to *do* ?" And when his life-work is completed he anticipates with lowly joy a gracious welcome from his adored Master, who will say unto him, "Well done, thou good and faithful servant."

VI.—MISS AIMLESS.

That is the name of the lady whose likeness we see on the next page of our Album. How or why her name was put on the teachers' roll I cannot tell ; neither can she. It is on ; all I can say is that it is

not much of an ornament to the roll, and she is not of much use in the class. She never could give any clear and satisfactory account of herself being there at all. It was certainly not because of any special fitness, or real desire, or resolute endeavour on her part. Possibly there was a scarcity of teachers; or she might have been offended if she had not been asked when others of similar age and standing were being appointed to classes; or it may be that her parents, being persons of influence at the chapel, might feel pleased if she was thus noticed. But little or no good has come of the appointment. No good was clearly and firmly aimed at by our young friend. All along, indeed, she has aimed at nothing and hit it.

From the Post Office Returns we learn that last year over 20,000 letters were sent to nobody; they bore no address, and so landed in the Dead Letter Office. I cannot tell how many lessons Miss Aimless has taught, whose course and destiny has been as blank, dreary, and dead as the course and destiny of the 20,000 letters. She has no definite plan of teaching: no settled purpose giving unity and vigour to her whole movements. She enters the school with listless or wandering gaze; chats and trifles with any light-minded, lazy teacher or official; wonders what she must have for a lesson; wishes lessons would come of themselves, and then teach themselves; talks silly stuff to the girls, and when tired of this reads them a shilly-shally book; is impatient for the bell to ring for closing, and soon it does to her infinite relief. Now, before we turn to the next portrait let me say that in Miss Aimless, while there is much to blame, there is much to pity, and something to hope for. She was never taught when young that life—that *her* life—should have a given plan and a grand purpose; that to live a random, purposeless life was a sin and a shame. She is not without capacity and goodness. There is dormant force in that brain, and latent fire in that soul, just as there were many good and precious things, costly jewels, sterling coins in some of those 20,000 letters. Looking at her face and watching her movements you may see fickleness and irresolution; but if, by the grace of God, she is *thoroughly* converted, and the constraining love of Christ glows in her soul, then she too may say, "This one thing I do," and with true womanly tenderness and courage labour on until she also can say, "I have finished the work Thou hast given me to do."

VII.—THE EARNEST SCHOLAR.

This likeness is but a faint and poor picture of a lad I met with years ago in a Sunday school in the North of England. In early life he became a disciple of Jesus, and right nobly did he serve his great Redeemer.

But he was earnest before he was converted—earnest in work, in play, and possibly in mischief too. He formed one of a group of boys who attended the same Sunday school. An extraordinary feeling of anxiety for the conversion of souls had been awakened in the school and Church. Special services were being held, repenting prodigals were

coming back to their Father's house. One night, amid an influence which bowed almost all present into stillness, and reverence, and prayer, this lad arose, left his seat, came forward to the communion with tears and cries, and asked God to forgive his sins. And God *did* forgive his sins, and filled his young heart with great gladness. But mark the earnestness of which I have spoken. No sooner had he found Jesus than he went back to the pews, and soon I saw him pleading with his companions, beseeching them to come to Jesus, and not in vain. Some fifteen or twenty fine, energetic lads were gathered into the Church. After serving his Lord only a few years, this earnest scholar was promoted to the holier service and happier fellowship of the Church in Glory. Underneath this portrait I might very appropriately write, "With both hands, earnestly."

VIII.—THE TIMID SCHOLAR.

Before we close the Album for this month, let me ask you to look at the likeness of this esteemed young friend. You see in her face some indication of her timidity and weakness. Whenever I have seen her—and I have seen her often—she has been gentle, patient, and quiet. Yet she is not cowardly; she is as far from that as she is from bluster and show.

I never heard her *say* much for Christ, but I have often admired the beauty and stillness of her temper, and the rare consistency of her deportment. The means of grace she attended with regularity, rarely missing the class-meeting, although she could never raise enough of confidence to speak. But if she could not speak for Jesus there, she could cheerfully brave the sneers and oaths of an ungodly father, when those sneers were directed at *her* prayers; she could bear gladly the scorn of her old companions, from whom she separated herself when she became a Christian; she could hold on her way in spite of the banter and impiety of workmates and relatives. She may be timid, but she is really a good, noble, pure girl, and is thus able to resist the sternest foes.

"'Tis said that a lion will turn and flee
From a maid in the pride of her purity."

TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CHAPTER I.—INTRODUCTION.

"OM! Tom!" said a feeble voice, "I am going."
"Going where?" said Tom, a boy of about nine summers, who was sitting by the expiring fire, but rose as he spoke and went to the side of the woman who had broken the silence: his poor sick mother.
"Going to your father," said she, "and to leave you all alone in this wide, wide world." Here she was obliged to stop, her

grief would allow her to say no more. She put forth her thin arms, and placing them around the boy, drew him close to her, kissed him, and gave vent to her feelings in tears.

It was night, cold and dark. The only light they had was a small glimmering which shone through the small window of their cellar from a lamp in the court outside. The fire went out, the fuel was done, and the room grew quite cold. The cupboard, or rather the shelf, for they had no cupboard, was empty. All that day they had been without food, and for many days they had not had sufficient.

Some years before they had a home, which, though a poor one, was the abode of peace. Tom's father, a good, honest man, but as poor as he was honest, died, and left to his widow no fortune but poor Tom, a few household goods such as are usually found in the homes of the industrious poor, and the usual benefits of a sick society. Thus at a very early age Tom was an orphan, with no possessions but a small picture-book and a plaything known as a monkey up a stick.

When Mrs. Foster had purchased black for herself and the boy, buried her husband, and paid the various little debts incurred by her husband's protracted sickness, the ten pounds which she got from the club was almost all gone. She had been accustomed to work all her life, and had no difficulty therefore in bringing her mind to it new. She was willing enough, and then able enough to set to work for herself and son; but the thing to be considered was, where was the work to be had? What could she get to do? After thinking of many things, the most likely seemed to be charring. This kind of work she sought and found, and could have managed tolerably if she could have got enough of it. This was the difficulty.

After months had passed she found herself getting behind. She worked hard to pay her way, but could not. Rent days came, and no rent was ready. Then began her troubles. The landlord grew impatient and demanded his rent. The poor widow pleaded her poverty, but that does not pay accounts. Everything that she could pawn she had done in order to meet the demands of hunger and the landlord. Her boxes were not like some parts of the sea are said to be, "bottomless." She had pawned or sold all they had contained, and then sold the boxes themselves.

One morning, when they had eaten the last bit of bread for breakfast, and the widow was wondering where she should go for a day's work to get the next meal, the door opened and a stranger walked in. He was a rather stout-looking gentleman—one of that class known in some parts of the country as the "bomba," or the bailiffs.

The house did not contain much; but what there was he took. When all was sold the amount due for rent was not covered. Not knowing what to do, and a little frightened, she gave up the key. And now she and her boy were without a home of any kind. Their

only refuge was the streets, and their only cover the wide arch of heaven or the narrow arch of some railway.

For some hours they wandered from place to place, wondering where they should pass the night. At length, wearied with walking and faint with hunger, they sat down upon a door-step. Tom began to cry for bread, but the mother could give him none. Her sorrow was indescribable. A lady passing where they sat heard the lad's cry, saw the woman's distress, and inquired its cause. With a sad heart the poor widow told her tale. It was so simple, yet mournful, that it was effectual. It touched the tenderest feelings of the kind-hearted lady. She gave her five shillings and a card. After bidding her call next day at the address printed on the card, she wished them a good eve.

If the prayers of a poor widow can bring blessings from God's throne they would fall upon that lady like showers on the mown grass. And who would say that they cannot? Is not God the "Father of the fatherless and the husband of the widow?" In sending this angel of mercy, this minister of life, He was supplying the wants of both.

New life and hope were infused into the poor widow's heart when she was quite sure that she really had got the five shillings, and was not dreaming, as she half supposed. They found lodgings, had a good warm meal, retired full of thankfulness, and slept well. Applying next day at the house named, she got employment, by means of which she supported herself and son, and soon had a somewhat comfortable room in which to live. This continued for a considerable number of months. But the widow was to have more disappointment. Her employer was obliged to leave the country, and once more Mrs. Foster's income was a very uncertain thing. "Misfortunes seldom come single." Her health, which for some time had been giving way, now failed. For a considerable time she was laid aside, unable to do anything. Their wants were few; but with no income they soon used up what little cash the widow had saved. Once more she was obliged to part with her clothing, and exchange her comfortable room for the cold, dark cellar in which we now find her. Here she has been for some weeks, sick all the time.

Every day she grew worse, until we find her, cold, feeble, dying, upon a bundle of straw. For herself she has no wish to live. Death to her, as to thousands of others, would be a happy release. But what will become of her boy? As she clasped him to her bosom and wept, the tears wet his face.

"Don't cry, mother," said he. "I will go out; perhaps some one will give me a bit of bread. I will bring it to you, for I know you are very hungry." "The Lord protect you, my child," said the sick woman, as she released her hold upon him. "I won't be long, mother," said Tom, as he seized his cap and made for the door, which he soon closed behind him, leaving his mother in the cold, damp cellar.

CHAPTER II.—MORE SORROW.

It was December. The night was cold and wet. Snow had fallen, and the streets were thickly covered with sleet. Cabs and omnibuses dashed through the mud, whilst foot passengers hurried along as if bent upon reaching home. Men with warm overcoats and mufflers, women with thick jackets and shawls, protected themselves from the bad weather. It was one of those nights which make us thankful for a shelter, and dispose us to pity the poor.

Tom soon found himself in the public streets, his bare feet smarting with the cold. On he went, up one street and down another, scarcely knowing where he went. He looked imploringly into many faces, but no one seemed to notice him. Hungry and cold, he sat down upon a door-step and began to cry. But suddenly recollecting his dying mother, he wiped his eyes and face as well as he could with the sleeve of his jacket. He wondered what he could do, or where he could go, to get a little bread. Once more trudging along, he determined to go to a big house a little distance off. He remembered that his mother had told him as they passed one day how rich the people were who lived there, and what a lot of servants they always kept. He was soon at the door, and after a while rang the bell as gently as he could. Shortly the door was opened by a man who looked at the boy as savagely as he knew how to do. Trembling with fear and cold, Tom said: "If you please, sir, will you give me a——" Before he had time to finish his request the cold-hearted man shut the door in his face.

We leave our readers to imagine what Tom's feelings would be as he turned from the great house. Disheartened, he passed along the next street, and stopped once or twice to look into the shop windows. There was bread enough and to spare, it seemed to him; but, alas! "no one gave unto him." Spurred on by the thoughts of his mother, he determined to ask for a bit of bread in one of the large shops. Passing the door of a bread-shop several times, he mustered courage at length to enter. Walking to the end of the shop, where stood the master, he said: "If you please, sir, will you give me a crust? I do not want it for myself—my mother is sick and hungry. *Please give me one for her.*" The shopman, accustomed to tales of poverty, many of them doubtless false, had hardened his heart against all beggars. Looking somewhat sternly at the boy, he said: "Go tell your mother to work for her crusts."

This was almost more than he could bear. Turning from the shop with a heavy heart, he retraced his steps towards home. He was afraid to ask again. As he passed along a principal street a gentleman suddenly leaped from a horse, and cried: "Here, boy, hold this horse." Tom seized the bridle and kept the horse there, until his owner returned, leaped into the saddle, throwing twopence to Tom as he drove away. Into the first bread-shop Tom darted, got two buns, put down his twopence, and ran towards home as fast as ever he could. Breathless, he reached the door, quietly opened it, and

slipped in. All was quiet. His mother was asleep. He did not wake her, but waited until she spoke.

"Tom," said she, faintly, when he had been in a little while. "Yes, mother," said Tom, "I am here—I told you I would not belong. I have two buns for you." But the woman needed no bread. Bidding him eat one himself, she lay silent for a while. "Tom," said she, "God is going to take me away. I shall have to leave you all alone. Very soon you will be without both father and mother. When I am dead be sure that you are a good boy. I want to give you this," continued she, taking as she spoke from beneath her head a small Testament. "This book was given to me by your dear father. I now give it to you. I have nothing else to give you. Take it, and promise me that you will never part with it."

The boy readily promised all she wished him to do. "One thing more," said she. "Read this book every day, and love the Saviour of whom it tells, and of whom I have so often spoken to you. Never let anything nor anybody make you dishonest. Every night and every morning be sure to pray to Jesus, as I have always taught you. The Lord will soon send one of the angels to take me away from this cold, dark place. And when I am gone God will take care of you if you are good. Some day He will send for you; then we shall meet your dear father in heaven and never be parted again."

She kissed her boy, who now lay by her side. There was silence for a while, during which the tired boy fell asleep and forgot all his troubles. When he awoke it was day. He sprang up, leaned over and kissed his mother. He was surprised to find her so cold and still. "Mother! Mother!" said Tom, but there was no response. Her troubles here were ended. Her soul had taken its flight, and there lay her lifeless body cold and still.

BAND OF HOPE PAPER.

PRAY FOR YOUR FATHERS.

BOYS and girls do not know their power. It is greater than they think, and if they were always brave enough to make use of it, they would do a deal of good in the world.

Let me tell them a true story.

Mr. Leyburn was a kind husband, and Mrs. Leyburn was a dutiful wife. They had been married to each other about nine years, and had two fine children—a boy aged eight and a girl six years of age.

Their home was as comfortable and as attractive as money could make it, for James Leyburn had been a hard-working young man, and, commencing life in the humble position of a clerk, he had risen, by integrity and industry, to be one of the most successful merchants in the town.

He had married a lady rich in worldly possessions and rich in disposition, for Mrs. Leyburn was naturally kind, patient, cheerful, and hopeful.

They were as happy as the day was long, until, alas! James Leyburn gave way to unsteady habits and began to neglect his business and his family.

Things went on from bad to worse until Mrs. Leyburn's jewels had to be sold to pay accounts, and the business, which was doing so well before, was now going to rack and ruin.

Little Charlie was not old enough to realise their altered position, but he knew that things were not altogether right, and even sister Carrie's little face grew troubled, for her papa never seemed to want her now. He never came home early, and never caught her up in his arms and kissed her as he used to do.

She knew, although now she seldom saw him, that something was the matter.

Mamma's looks also showed very plainly that things were not as they used to be, for she always looked poorly, although she was as kind and as attentive to them as ever.

So one day little Carrie called her brother Charlie to her, and, with an anxious face, asked him what was the matter, that mamma looked so troubled, and that papa never came to them.

"Father's a beast, and I don't love him a bit," said Charlie.

"Hush, hush," said gentle Carrie; "I love papa very much. Why don't you, Charlie?"

"Because he stops out late and gets tipsy," said Charlie.

"Let's pray for him," said Carrie, and they did. Charlie first, and then Carrie.

"God bless dear papa, and make him sober. God bless mamma, and make her right well again. God bless Charlie and me, and help us to do papa some good."

As luck—as chance—nay, as God would have it, their father was passing the room door at the time that Carrie's little tongue was lisping this prayer.

I will not weary you with a long story, but if you could only see James Leyburn's happy family now, you would know the result of their prayer.

It did not come right all at once, but that little simple prayer aroused the father's conscience, and he resolved to abstain from the drink, and an ever faithful and ever patient wife has helped him to keep his vow; yes, and his children have helped him too, for, like their dear mamma, they resolved, for father's sake, to have nothing to do with the deadly cup, and often do they pray that God will help them "to do papa some good."

Often does James Leyburn, now the first merchant in town, tell his distinguished guests how it is that he has no wine to offer them, and often does he thank God for two dutiful children who prayed, "God bless dear father, and make him sober."

THE CHILDREN'S BOOK-SHELF.

By the EDITOR.

SOMETIMES when I sit down to write for the entertainment or instruction of my young friends, I ask myself whether what I am doing will be of any service to them. How many will read with care what I write? And of those who do, how many will attend to what I say?

Has any boy now who read what I said about books last month got his father to put up, in some snug corner of the house, a nice little shelf for *his* books? Or has any girl done this? I will suppose that both boys and girls have done it, and you are now looking down this page to see what books I shall recommend to you.

Well, I hope you will not be surprised nor disappointed when I advise you to let the first book you put on your newly-acquired shelf be **THE BIBLE**. Most of you will perhaps say that you have a Bible already. I hope you have. It is one of the first books every child should be able to call his own.

But what sort of a Bible is it that you have? There was a time, not very long ago, when Bibles were very scarce and very dear. They were generally printed on good paper and in clear type, but they cost a deal of money. Some good men thought this was to be deplored. They loved the Bible, and found it to be a great blessing to them, and so they wished others to be able to get the precious book. This led them to form a society to print a great many Bibles, and to sell them at such prices that even poor people might afford to buy them. Somehow there is always a drawback even in the doing of good things in this world, and I fear that making Bibles plentiful and cheap is not an exception to this statement. The Bible is not esteemed by some as it ought to be, because it is such a common book, and this feeling of disesteem is increased in some minds by the forbidding appearance of the Bible as a book—the paper, and print, and binding being of any but an attractive character. But there are beautiful Bibles to be had, and at a reasonable price, too. Of late years especially has it been so, as if the conviction had come into the minds of its publishers that so good a book as the Bible is morally ought to be a good book in its material and workmanship.

My advice to my young friends is that they get a nice copy of the Holy Scriptures to put on their book-shelf. But by a nice copy I do not mean one that is very fine, with much gilt and ornamentation on its covers. I mean one that is well printed on good paper, and bound with neat elegance, so that, as far as the getting up of the book is concerned, to see and use it shall be a pleasure.

For this is the purpose for which the Book must be had, not for the filling up or ornamentation of the shelf, but for *use*.

And how shall a child use the Bible? Some will think this a very simple question, which admits but of one answer, and that readily given—he must read it. Yes, that is true, he must read the Bible, but how to do this requires a little direction. There are parents and teachers who would tell a child to read the Bible right through, from beginning to end. The great Mr. Ruskin tells us that his mother made him do this as soon as he was able to read, she, however, reading alternate verses with him. “In this way,” he says, “she began with the first verse of Genesis, and went straight through to the last verse of the Apocalypse; hard names, numbers, Levitical law, and all, and began again at Genesis next day.” Mr. Ruskin says he derived great benefit from becoming thus acquainted with the contents of the Bible at so early an age. Still I would not recommend any other mother to imitate his mother's example, for in most instances I fear it would end in making the Bible an object of dislike to the child thus treated.

The Bible is God's Book, holy men wrote it as they were moved by the Holy Ghost, therefore the Bible should ever be approached with reverence and affection. As a rule, it ought not to be put to a lower purpose than that for which it was given. I think it very unwise to make it a school-book in which we first learn to read. And especially would I refrain from making it a task-book, portions of which are to be committed to memory as a punishment for some failure of duty. We should do with God's Book as we do with His name—hallow it. All our associations with it should be of a pleasant and attractive kind.

My dear young friends, I wish to impress on your minds that having such a book as the Bible to read is one of the most precious privileges that could be given to you. You will understand the meaning of this statement the more as you grow older and gain greater intelligence. It is to having this book, and our fathers having had it hundreds of years ago, that we owe all the difference between ourselves and the heathen who are without God and without hope in the world.

Be thankful, then, for your Bible, and read it not as a task, or merely from a sense of duty, but from a desire to know what it teaches, that you may thereby be made wise unto salvation. At first read those parts that are easiest and most interesting to you—its narratives and histories. What can be more charming than a great deal of the history found in the Book of Genesis—the history of the patriarchs, for instance, and especially the history of Joseph? As you grow in years, and your capacity for knowledge increases, you will find the parts that you cannot now understand to become easy and instructive, though even to the end of your life you will undoubtedly find in it many things hard to be understood. Still, you will be so blessed by your knowledge of the truths it teaches, those truths will inspire you with such hopes, enrich you with such consolations, and fortify you with such principles, that the Bible will

become to you the most precious of all books, and with a very sincere heart you will utter the prayer—

“ May this blessed volume ever lie
Close to my heart, and near my eye,
Till life's last hour my soul engage,
And be my chosen heritage.”

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS. FEBRUARY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
4 Jesus in Galilee.....	Matt. iv. 12—25...	Ver. 28
11 The Blessed Life.....	Matt. v. 1—16.....	Ps. cxii. 1
18 The Law and the Gospel	Matt. v. 17-24, 38-48	John i. 17
25 Giving and Praying	Matt. vi. 1—15	Phil. iv. 6
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
4 Elijah and Ahab.....	1 Kings xviii. 1-16	Ps. cxix. 46
11 Elijah and Baal's Prophets	1 Kings xviii. 17-29	Ver. 21
18 Elijah's Sacrifice.....	1 Kings xviii. 30-46	Ver. 24
25 Elijah at Horeb	1 Kings xix. 1-18	Job. xxiii. 6

MARCH.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
4 Care and Trust	Matt. vi. 19—34...	1 Pet. v. 7.
11 The First Missionaries ...	Matt. x. 1—15.....	Mark vi. 12.
18 Christ's Forerunner	Matt. xi. 1—15	John v. 35.
25 The Forerunner Slain	Matt. xiv. 1—14...	Rev. ii. 10.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
4 The Story of Naboth.....	1 Kings xxi. 1-19..	Ver. 20.
11 Elijah translated	2 Kings ii. 1-11....	Ver. 11.
18 The Spirit on Elisha.....	2 Kings ii. 12—35	Ver. 15.
25 Review of Quarter's Lessons.....		Isa. xiv. 21.

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

SCRIPTURAL ENIGMA.

1. You will name, as my first, King David's fourth son ;
 2. Then one who "good works and almsdeeds" had done ;
 3. Next, one who was king, and a great city built ;
 4. Then, a prophet who David reproved for his guilt ;
 5. Next, one who was named when the glory was gone ;
 6. Then, he who o'er Jabin a victory won ;
 7. Now, name the fair garden where Adam was found ;
 8. Then, a king who was carried to Babylon bound ;
 9. Then, next name the father of Samuel the seer ;
 10. The father of Othniel, next, make appear.
- Then take the initials, a king you will see ;
As he punished others, so punished was he.

ADJUDICATION OF PRIZES.

Questions Answered.	NAME.	ADDRESS.
41	William P. Thompson..	36, Falmouth Road, London.
40	Sarah O. Sanderson....	Randolph Street, Sunderland.
40	Alfred Pike	3, Montague Street, London.
39	Samuel Skelding... ..	Stour Hill, Quarry Bank.
38	Lily Faull.....	Fore Street, St. Ives.
38	R. Kyle	64, Bondgate Street, Alnwick.
37	Willis Eadon	67, Roebuck Road, Sheffield.
37	Katie Baker.....	24, South Terrace, St. Ives.
35	Maggie Faull	Fore Street, St. Ives.
35	Jennie Icke	44, High Street, Shrewsbury.
35	Gilbert Irvine	75, Lawrence Street, Sunderland.
35	Robert T. Rowley	Stour Hill, Quarry Bank.
35	W. W. Wainman	High Street, Willington.
35	Benjamin Worth.....	29, Melbourne Street, Stalybridge.
34	J. H. Piggin	7, Peckitt Street, York.
30	J. H. Brown	19, Cromford Street, Nottingham.
29	Mary J. Holloway	193, Four Ways, Cradley Heath.
29	S. L. Lawton	Lees, near Manchester.
28	Mary J. Greenwood	Cross Park Street, Batley.
25	F. Meldrum.....	10, Crane Street, Chester.

Our young friends may expect their prizes with the March parcel.

Memoirs.

—o—

JONATHAN COULDWELL

Was the eldest son of our esteemed friends, Geo. and Hannah Couldwell, of Dean Head, Hunshelf. His parents, anxious for his spiritual welfare, sent him when but a child to our Sunday school at Hunshelf. There he was a remarkably quiet and attentive boy. He was also one of the foremost in answering questions put by his teacher or the superintendents of the school.

At school he made rapid progress in learning, and could recite many portions of Scripture, and also many of our Sunday-school hymns, from memory. This dear boy, whose early removal has caused so much sorrow to the loved ones at home, took a deep interest in religious conversation with his mother, and often expressed a desire to be a true Christian.

When he did wrong he would at once confess it, and express regret. Usually his obedience was prompt and loving. These traits of character were a hopeful sign as to the Christian life he so much desired to live. And yet it was not until his short and severe illness that the evidence of a renewed heart was fully seen. For three weeks and two days he suffered very much from heart disease and congestion of the lungs. But though he suffered so much his patience never failed, and his grateful expressions to those who attended him won their admiration and love. At the commencement of his sickness he seemed to think that he would not get better. The first Sabbath evening he sang that beautiful hymn beginning—

“The Great Physician now is near,
The sympathising Jesus,”

right through. About three o'clock on Monday morning he inquired where his father was. On being told that he was watching the sheep, he recited the whole of the 23rd Psalm. He then sang, “Safe in the arms of Jesus.”

Soon after he became insensible, and was unable to speak to anyone until the Friday afternoon. His mother and a friend were watching and weeping over him, thinking he was nearly gone, when he opened his eyes and said, “Mother, don't cry; we shall meet again in glory, glory, where all is holy, holy. Then, mother—

“Beyond the river's brink I'll lay
The cross that here is given;
And bear the cross of life away,
And love Him more in heaven.”

This hymn, and “Lord Jesus, I long to be perfectly whole,” seemed to be particular favourites with him. He spent the whole of Friday night in praying, singing, and reciting various portions of Scripture.

An aged Christian standing by his bedside shed tears of joy to see him in such a heavenly state of mind, and, turning round, said, “Oh, that our latter end may be like his!”

On Saturday morning he called, “Mother, who are these?” “No one but myself, love.” “Oh, yes; angels are around my bed, and Jesus has sent them to wipe away all tears from my eyes.” At the close of the day he sang, “A day's march nearer home.”

One of the servants who had been away from the farm some weeks, on returning and going in to see Jonathan, the boy greeted him with the words, "We shall meet on the beautiful shore." About one o'clock on the Sunday morning, he sang the hymn, "Oh, think of the home over there," right through, and then quoted many passages from our Lord's Sermon on the Mount.

On Monday morning about two o'clock he sang his last hymn on earth :—

"Sweeping through the gates of the New Jerusalem,
Washed in the Blood of the Lamb."

He died on Tuesday evening, April 4th, 1876, in the twelfth year of his age. So quiet were his last moments they seem to be best described by Newton—

"One gentle sigh the fetters broke,
We scarce could say he's gone,
Before his willing spirit took
Its mansion near the throne."

When in health he was a strong boy and fond of play; honest and truthful, civil and obliging, obedient to parents and teachers, he was loved and respected by all who knew him.

His funeral sermon was preached in our chapel at Hunshelf by the Rev. J. Graham on Sunday, June 4th, 1876. J. B.

Poetry.

DISCONTENTED MARGARET.

"MOTHER, I wish that I were rich
As Bell and Clara Gray, [them,
And had a splendid coach, like
To ride in every day.

"Their garden is so large and fine,
So filled with splendid flowers;
Their house so grand and beautiful,
Six times as big as ours.

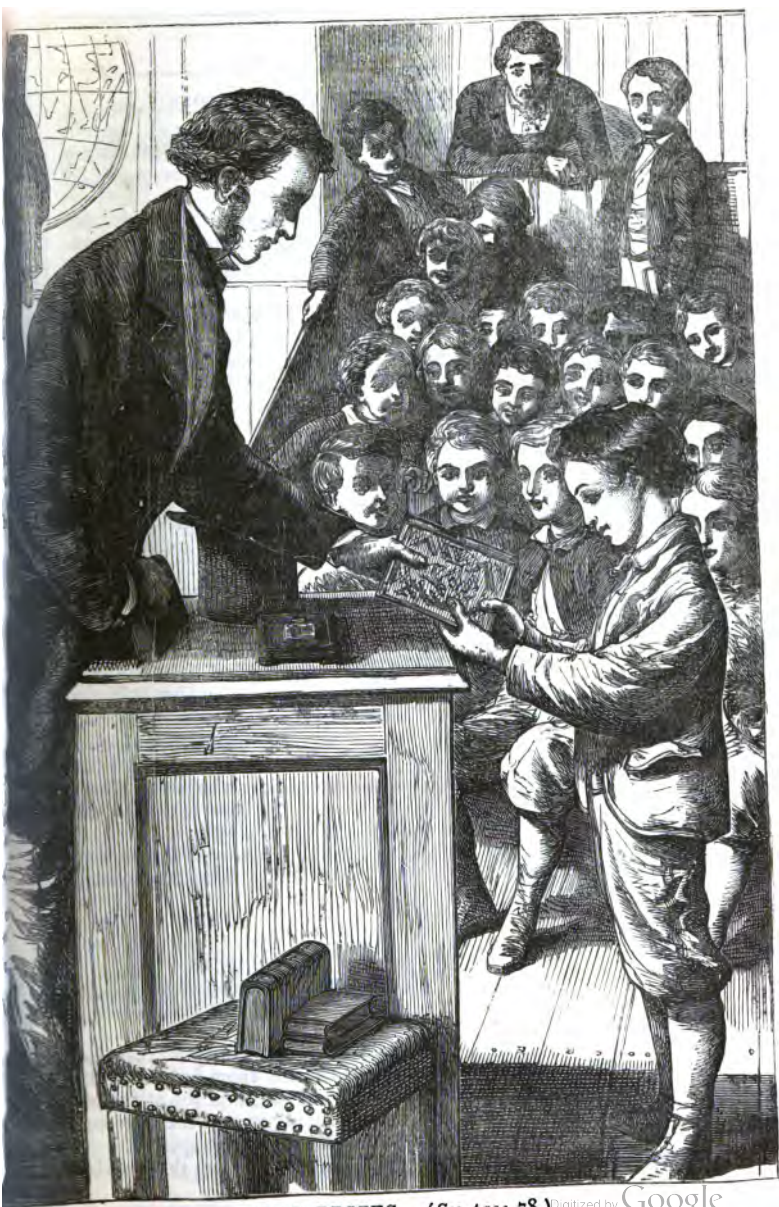
"They've silks and jewels without
And purses full of gold, [end,
And books and games and toys and
Most lovely to behold." [dolls

"You must not question, dearest
Why God does so and so; [child,
The wealth is His: He knows on
His bounty to bestow. [whom

"Nothing do you deserve from God,
And yet you've parents dear,
Food, clothing, home, and all you
For many, many a year. [need

"Be grateful and contented, then,
And strive to do what's right.
Rather than wish for others' wealth,
Your duty keep in sight.

"The riches of God's grace and love
Humbly implore each day;
Nor sigh for earthly vanities
Which quickly pass away."



OUR PRIZES.—(See page 78.)

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 8.

FROM BEN BARLOW TO TOM BLUNT.

Waterside House, Worcester;

Jan. 30th, 187—.

MY DEAR TOM,—

All right about the rabbits. But of course you will let Bob have the pick. I will write to tell him what to do.

Did you have much skating? Wasn't it provoking? I left my skates at home, and could only slide while the rest were skating; and there, the very morning father sent the skates we had: as they and it has been wet ever since.

I say, Tom, you *should* see some of our fellows skate!! I thought Mr. Jones could do it well, but there are a dozen here as good skaters as he, and one of the masters—a Scotchman of the name of Macpherson—can cut him out altogether. Talk about figures of eight and such things! why, he can write with his skates any name you like to set him!

Remember me to any of the boys who ask about me. I remain, your old schoolfellow,

BEN BARLOW.

Letter No. 9.

FROM BEN BARLOW TO "BOB."

Waterside House, Worcester,

Jan. 30th, 187—.

DEAR BOB,

I have arranged to swap three of the young rabbits for two of Tom Blunt's blue ones. Mind and choose the strongest of the lot, and put them in the driest hutch—that next to the fowl-pen.

I hope the pigeons and fowls are all right. Give old Carlo a pat for me. Yours truly,

BEN BARLOW.

Letter No. 10.

FROM CHARLIE THORNTON TO BEN BARLOW.

High Street; Woodbourne,

Feb. 28th, 187—.

MY DEAR BEN,—

Many thanks for your two letters; and especially for the last long one. I must beg pardon for not answering them before. One reason was that I had nothing very new to tell you, and the other was that I did not like to write a short note in reply to two long letters; so I kept putting it off until I could sit down for a long spell.

I intended writing last Saturday, but, for a wonder, the weather

was beautifully fine, and so a few of us went for a stroll into Upleigh Wood. It was jolly! We hadn't been since we fetched the evergreens for Christmas, and to our surprise we found lots of snowdrops in bloom, and even a few violets in warm corners.

But I must tell you what a grand time we had on the ice the Saturday after you left. The mill had not been at work for several days; the water was level with the top of the floodgate, and there was thick ice to within three yards of the weir. Tom Blunt, John Williams, and I were on it from seven in the morning until three in the afternoon, excepting the few minutes spent in bolting breakfast and dinner. At three I had to go and help father in the shop, but I left half the boys on then. Mr. Jones was there soon after breakfast skating beautifully and cutting figures and flourishes on the ice.

When there were enough of us there, we started a game at "bandy." The master took one side, and I had the other, with two extra players to make up for the master. We got the lead, and for nearly an hour we kept the other side out. It was glorious play, I can tell you! I wish you could have seen some of Mr. Jones's hits! You know the thin blackthorn stick he always plays with; well, directly he struck it, the ball seemed to fly right to the other end of the pond; but I always took care to send Tom Blunt down there, and he stopped the balls with his heavy down hits, and bandied them back safe to me before any of the other side could get hold of them. When I left at three o'clock we had just finished our second innings—the master's side had only won one. I left Tom Blunt in charge of our side, and he won again before dark.

You will be glad to know that I have kept second in the class for the last fortnight. Of course Joe Bland still keeps at the top. I wish I were like him—but I don't know—I should like his brains to study with, but I should not like to be as quiet as he is in the playground, though he seems to enjoy himself in his way, and everybody likes him.

I think I told you I meant to learn all I could in this half-year. Father thinks of getting me into some situation by the end of that time. He won't be able to keep me at school much longer. How are you getting on in your lessons? Tom Blunt and a lot of our boys send love to you. Father and mother wish to be kindly remembered, and I remain, yours very truly,

CHARLIE THORNTON.

P.S. Have you paid Ted Instone out for his pranks yet? I should so like to come and help you.

Letter No. 11.

From MRS. BARLOW to BEN BARLOW.

The Laurels, Woodbourne.

March 4th, 187—.

MY DEAR SON BEN,—

I hope you are well and happy and learning all you can. I

am glad to hear of you enjoying yourself as you do, but I sometimes wish your letters were *not quite* so full of sports, and that you said a little about your lessons and how you are getting on. Life is by no means all play, and you are getting old enough now to take a pleasure in study. Mind, I am not lecturing you, but I want my son to learn to be a useful man some day.

I sent your clean linen this afternoon by rail, and hope it will arrive safely. But, Ben, I was very much put about, on receiving your last basket of clothes for the wash, to see part of them covered with mud and discoloured as if you had fallen in the water. I hope you have met with no accident, but if you have, you must let me know all about it. Are you hurt at all, or have you taken cold from getting wet? You cannot understand how anxious we all are about you.

I trust you are keeping a good character at school. You recollect what your father has often told you—Be brave and truthful, and you will keep clear of quite half the dangers that beset your path. Never forget your prayers, my dear boy, and if you feel tempted to do anything you would be ashamed of, think of what we at home expect of you. Your dear father would rather see you beg your bread in the streets than have you tarnish your good name. And remember that every night in the old home the warmest and most earnest supplications that rise from your mother's lips to her heavenly Father are on behalf of her only son away at school.

Your father and Clara and Helen join me in love to you. Bob sends his love too, and wishes me to say the rabbits he got from Master Blunt are beauties—blue ones he calls them. I remain, my dear Ben, your affectionate

MOTHER.

Letter No. 12.

From BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
March 10th, 187—.

MY DEAR CHARLIE,—

I got your letter all right, and was glad to hear you beat the master's side at "bandy." But I expect he allowed you to choose the best players; for he is a tremendous hitter, and if there had been three or four really good players on his side, he would have been more than a match for you. The boys here never heard of the game until I told them, but I showed them how to play, and we had two very fair games. You see I had left my skates at home, and I was glad to get them to play at what I could join in. Of course none of them had got a proper stick besides me, but they got some out of the hedges and off the pollards. Two or three of them had a narrow escape of being locked up for damaging the fences.

I am only doing middling at my lessons. I get through them pretty well, except Latin and Algebra. Dr. Tasker says I ought to

thank my old schoolmaster for giving me a good rudimentary education. Latin is awfully dry, and so is Algebra. I don't know which is hardest. Two or three of the best scholars do lessons for those who like to pay for them, but I promised father I would never take up a lesson I had not done myself. So I am pegging away at mine sometimes for half an hour after the others have done, and there they are shouting and laughing and gaming round me till I feel I could hardly say my alphabet, let alone my Algebra.

I am getting on better in the playground, and shall soon be jolly with my schoolfellows. I ran so well with the "hounds" on Shrove Tuesday, that Belton, the captain of the first cricketing eleven, has promised to let me play when the season begins.

But I *must* tell you of the fun we had on Shrove Tuesday. Of course it was a half-holiday, and as it was a fine day it was decided to have the "hounds" out. They don't play "hare and hounds" here like we do at Woodbourne, but more like a real hunt. I advise you to try it some Saturday. This is the way we did it.

Everybody put on their strongest boots and the worst clothes they had. Two of the best runners—Sam Belton and Jim Wheale—were chosen for hares; and they each carried a bag of scent, consisting of bits of paper—copy-books cut up. They started off together, and, as they went, they dropped here and there a bit of the paper "scent," to enable us to track them. The rule was that they should never go more than twenty yards without dropping "scent."

After they had been gone fifteen minutes, all the rest of us—hounds of course—burst out in pursuit. It was easy running till we got to the bottom of the lane, for the "scent" was plentifully scattered, but after that it got scarcer and farther apart. First it led us right down to the river's bank, then back over a ploughed field into the lane again, and then straight to one of the ferries. Two of the hounds went across on the boat to see if there were any "scent" on the opposite bank, for the ferrymen would not tell us. At last they found it, and then we all got on the ferry and crowded so that the man could hardly work us across.

Then away we went through the hedges, over ditches, across a meadow, and over a sand-hill. Here a few of the younger boys turned back, but I kept on with the front pair of hounds. Once we lost the scent in a plantation, but we scattered ourselves about and hunted, till at last we found it in the trunk of an old tree where it must have been carried by the wind. Off we went again, across flooded pasture land, over ploughed fields where the damp soil clogged our feet, and then across the river again by a ferry lower down. Many a time did the "scent" cause us to double on the track we had taken. At last it led us along a turnpike road into a village called Powick.

I must tell you that the Worcester Lunatic Asylum is at Powick, and, of course, there were all sorts of jokes at Belton and Wheale having gone there. One of the fellows suggested that possibly they

had been taken for lunatics and locked up accordingly. Another said, considering the month, it was nothing remarkable if they had, for "mad as a March hare" had run into a proverb. After a long search, a piece of "scent" was found, and then another and another until at last we got to the asylum gate, and there sure enough lay another "scent" about half-a-dozen yards up the asylum drive. A surly-looking official was loitering about, and we asked him if he had seen two lads with bags on their backs. He would not answer us civilly, so we all began laughing at him. This made him angry, and he walked off, muttering something about "there be many people outside of the 'sylum with less sense than lots as be in."

We found the scent again presently, and led off across country once more. There were only five of us now—all the rest having decided to walk home by the turnpike road. I was determined to be plucky, though my legs ached badly and my feet were sore, so I struck off into the fields with the other four "hounds." Across the river we went again, then down country lanes, over the same meadows as before, again across the ferry, round the racecourse, and straight up to the playground and into the school. There the first to receive the five dirty, sweaty "hounds," with our clothes torn and splattered from head to foot with mud and clay, were the hares, Belton and Wheale, looking as fresh, cool, clean, and neat as a thorough wash and a complete change of clothes could make them.

But I must pull up. I had no idea I had written so much. Ted Instone, who sits opposite me, has just looked up from reading "Frank Fairleigh" to ask me which of the county newspapers I am special correspondent for.

I thought of telling you all about a fight I had with one of the boys, but I have not time now. With kind regards to your father and mother, I remain, yours very truly,

BEN BARLOW.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XIII.—THE ELEPHANT.



OF all the animals that manifest the extraordinary sagacity that some call instinct and others term understanding—the power of directing their actions in so intelligent a manner as to appear to be actuated by a kind of reason—there is none nobler than the elephant. It is the largest of all land animals, growing sometimes to the height of twelve feet, and weighing as much as five tons. It sometimes lives to the extraordinary age of two hundred years, so that in duration as well as in stature man is but a pigmy beside it. Elephants are only now to be found

in Africa and India, though in remote ages they were common in many parts of Europe. Their food is supplied by the grass and nuts and young trees of the vast forests that in many parts of Africa and India abound. While it is the strongest and the largest of all quadrupeds, the elephant is yet mild, gentle, and peaceful. It has a giant's strength, but seldom uses it like a giant. It is only when provoked that it becomes fierce and terrible. When well treated it is a social and friendly creature, and never abuses its enormous strength.

It is one of the best servants man has, being of far more use in the East than the noble horse even with ourselves. From time immemorial it has been used in war and for every variety of heavy labour. It is always employed in processions and similar state occasions; and a long line of elephants covered with handsome trappings, and bearing howdahs filled with gaily-dressed men, forms a picturesque sight. It may be a mark of the facility with which an elephant can adopt the improvements of civilisation, or it may be a proof that under civilisation the noble beast speedily loses his simple and natural tastes, but it is a fact that elephants take as much pride in the gorgeousness of their trappings as a modern young lady does in a new silk dress or a stylish bonnet.

In its wild state the elephant is generally found in herds; and as a herd of elephants moves forward, it seems almost as if the forest were being carried away. A small army would be required to stop their course. When attacked by men they scarcely ever attempt flight, but go straight forward, no matter what kind of weapon is used against them. Before the invention of gunpowder they were impervious to the most powerful assaults of men. The native with his darts was no greater terror to them than an old lady with a handful of darning needles would be to a herd of cows.

The head of the elephant is large, and the neck short and thick, but the long flexible trunk compensates for the short and almost immovable neck. By means of its trunk the animal can pick up objects from the ground, or reach those above it to the height of several feet. Its sense of smelling is very acute, and it is delighted with the same odours that please us. It will gather flowers with the ardour of a school-girl, and seems almost as much pleased with their beauty and perfume. Its hearing is very keen, and it is delighted at the sounds of music, beating time with its trunk or feet to its strains. Its ears are very large and hang down, though it has the power of raising them at its pleasure. Livingstone mentions measuring the ear-flaps of elephants that were four feet across, and four feet five inches in length; and tells us that on a sudden rain-storm he has not unfrequently seen a native find snug and complete shelter under one of his elephant's ears.

In the exquisite sensitiveness of its feeling the elephant excels all others in the brute creation, and probably surpasses man himself. The organ of feeling is constituted by the trunk, which has all the use of a hand. The trunk of a full-sized elephant is about three feet

long, tapering from the head to the point. It ends in two nostrils and is hollow all along. It is capable of being moved in any direction, and of being lengthened and shortened at will. It is so pliant and delicate that it can be wound around a slender branch of a tree, or it can pick up a pin from the ground, and yet it is so strong that nothing can be torn from its grasp. To render its grasp effective there are little protuberances on the under side, which contribute both to the sensibility of the touch and the firmness of the hold. The trunk serves as knife and fork and spoon, for it is by it that all its food is gathered and conveyed to its mouth, the drink as well as the more solid food being sucked up by it before it is discharged into its mouth. Nature has placed valves at the upper end of the trunk to prevent the water being driven too far. The stomach is so capacious as to hold ten gallons of water, and what is most remarkable is, that the water can be readily withdrawn from it, and frequently is so withdrawn and squirted over the back by means of the trunk for the purpose of a cooling shower-bath, or to drive away the troublesome flies. At the point of the trunk there is an extension of the skin that answers all the purposes of a finger and thumb. A trained elephant can perform the most surprising tricks by means of it. It can take up a brush and sweep a room, it can untie knots in a rope, it can ring a bell, unlock a door, and even write with a pencil.

The eyes of the elephant are small, but large enough to exhibit great variety of expression, as it is pleased or angry. Its legs are very thick and stiff to support the immense weight of its head and body. When it lies down it does not, like other animals, bring its hind legs under it, but extends them backwards like a man when he kneels down. This peculiar movement makes it more valuable to man.

One or two elephants have been born in the London Zoological Gardens; but elephants rarely breed when tamed and domesticated. Hence they have to be caught in a state of nature, and all kinds of art are used to capture them. Sometimes they are decoyed by other elephants trained for the purpose. Sometimes hunters go into the forests two only together, and waiting their opportunity of getting near to an elephant that is by itself, they then throw around it a strong hide rope, and, wrapping it round and round its limbs and body in all directions, fasten it securely to the strongest trees near enough for the purpose. They then spend weeks in taming it; and, giving it more liberty as its wildness and fury leave it, they lead it home in two or three months in triumph. Sometimes elephants are captured by being driven into a trap called a *corral*, being an enclosure strongly fenced and open on one side only, which is immediately secured by prepared fences when they are safely inside.

Formerly they were taken by being lured or driven where deep pits had been dug, and then concealed by being strewed over with branches of trees. But this is not now practised, as the fall often injured them. Not a few instances have been known of elephants

coming to each other's help and, by means of their powerful trunks, pulling their unfortunate companion out of the trap—a lesson this to ourselves, to teach us how to behave to others in distress. The same kindness of nature is also seen in the fact that when one of them has found a good piece of pasture, he will immediately invite others to join him.

Elephants in England fetch large prices, and they are expensive pets to board and lodge, as they require a deal of “elbow room” and have a most voracious appetite. The celebrated peripatetic show of Wombwell's, that used to make its appearance at the chief fairs and “wakes” all over the country, cost weekly for the maintenance of its animals, before the collection was broken up into smaller ones, the enormous sum of £200. The larger elephant at Belle Vue, Manchester, cost the proprietor a few years ago £750. Frank Buckland tells us that a large elephant with good tusks would have fifty bidders at a thousand pounds any day. A most valuable elephant worth more than that sum was shot, some years ago, by the military who were called in for the purpose, because it was supposed to be gone mad. It was afterwards proved that nothing more serious was the matter with it than the *toothache*, and all that was needed was that the tooth should have been extracted by some skilful elephant dentist. The soldiers were engaged firing rifles at it as fast as their pieces could be loaded, and the excited monster was breaking out of his cage to get at his tormenters, before their shots took effect.

The facility with which, under kind treatment, the elephant learns to perform the most difficult feats, offers a surprising contrast to the unwieldiness and bulk of his body. Elephants have been taught to dance on the ground, to dance on tubs inverted and arranged at certain distances, to walk on the tight rope, to throw stones at a mark and hit it, and to throw stones in the air and catch them again.

There are so many well-authenticated stories of the sagacity of this noble animal, that it is a matter of difficulty to make a selection. Two brief ones may serve as samples of all the rest. An elephant belonging to one of the officials of the Bengal Civil Service used to pass every day over a small bridge leading from his master's house to the town of Gyat. One day, on coming to the bridge as usual, he refused point-blank to cross it. The driver resorted to the utmost cruelty to compel him, and at last he reluctantly moved carefully forward. As soon, however, as he had got on the bridge it gave way and precipitated both elephant and driver into the river, the latter being killed, and the former with difficulty swimming out. Elephants have the habit of trying with their trunks and fore-feet suspicious places before venturing on them with their full weight, and there is no doubt that this elephant had a clear idea of the catastrophe that was about to occur. In the city of Delhi an elephant was generally fed by a number of tailors who sat working by the side of the road along which he passed every morning. One day a tailor,

from a spirit of mischief, pricked with his needle the trunk that was extended for the usual bunch of fruit. The animal, who believed in "tit for tat," returned that way several hours after and spouted a few gallons of dirty water on his humorous friend, reminding him that even an elephant can enter with spirit into a practical joke. As a general rule, the elephant becomes exceedingly attached to those who notice him, and can be as playful as a household pet.

Nature—which is only another name for the Deity—never comes short in any of her works, and never overdoes them. Her productions are simply perfect and complete. When we view the elephant, his structure, his intelligence, his natural abode, his willingness to become the friend of man, all is so perfect that to suppose any alteration is to suppose a change for the worse. The hand would be as imperfect by a finger added to it as by one taken away; and so we can only study the marvellous works of God, not to improve or amend them, but to appreciate the wisdom and adore the goodness of Him who hath made everything beautiful in its season.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

III. NATURAL PRODUCTS—SILVER AND COPPER.

SILVER.



SILVER is the whitest of metals. It is about ten and a half times heavier than water; does not easily tarnish by the air, and is not converted into dross by heat continued for any length of time, or, in chemical language, it is not oxidised. As native silver it occurs among the oldest rocks. It is found also in the same rocks associated with ores of other metals, as gold, antimony, &c. In the secondary strata it is often found with iron, lead, &c., and in the metamorphic rocks with copper. The earthy minerals with which it is most frequently united are granites, porphyries, and various metamorphic shales. When lead ore is found to contain silver in sufficient quantities to pay for its extraction, it is subjected to the flame of a furnace, blown on to with a strong blast; the flame melts the lead and converts it into oxide, called "litharge," which is in the form of reddish scales, and as these are formed the blast blows them off; in this way the lead is gradually consumed, leaving the silver with but a small quantity of it. This is put on to a cup made of bone-ashes, called a "cupel" (which gives to this operation the name of "cupellation"); the heat is then raised, and the lead which remains, forming a liquid glass with the broken ashes, sinks into them, leaving the silver bright and pure. In some districts silver is

extracted from its ores by what is called "amalgamation;" the finely powdered ore is mixed with water, some cuttings of iron, and quicksilver, and turned round in a barrel for a considerable time, when the quicksilver is drawn off through a small hole, and is found to contain all the silver in the ore, together with some other metals. The quicksilver is got rid of, first, by pressing, and then by distillation, so that it is all recovered for a second operation. Silver is sometimes found in quicksilver mines, but the latter is never found in silver mines. At Pasco, in Peru, there are several silver mines opening into the houses of the owners. Silver is chiefly found at Potosi, in South America. The mine was discovered by Hualpa, an Indian, whilst he was running after a wild animal. In laying hold of a branch of a tree he found several small pieces of silver sticking to the roots, which were torn up by his weight; but, making a confidant of a friend, who betrayed the secret to some Spaniards, he did not reap much benefit from his discovery, for the Spaniards took possession of the mine in the year 1545. Peru contains 784 mines of silver, as well as 69 gold mines. Silver is chiefly used for coin, for ornamental purposes, and for the service of the table, for which its cleanliness and beauty strongly recommend it.

It is so frequently mentioned in Scripture that it must have been as much in use among the Hebrews as it is in Britain. Whence was it obtained? Both Jeremiah and Ezekiel point to Tarshish. The former notices Tarshish as being for silver what Ophir was for gold. That in common use among the Hebrews seems to have been obtained in an impure state—"Take away the dross from the silver, and there shall come forth a vessel for the finer" (Prov. xxv., 4). The touching words of Zechariah (xiii., 9) assume their full meaning when regarded from this point of view:—"And I will bring the third part through the fire, and will refine them as silver is refined, and will try them as gold is tried; they shall call on my name, and I will hear them: I will say, It is my people; and they shall say, The Lord is my God." When the silver was thus dealt with it became "refined" (1 Chron. xxix., 4) and "fire-abiding" (Numb. xxxi., 23.)

We have mention made of it as current "money" among the Hebrews (Gen. xxiii., 15, 16). It was made into "cups," "ornaments," and "idols." It was extensively used in the work of the Tabernacle, and manufactured into a variety of articles besides those mentioned. Some of its peculiarities are also referred to. Thus its bright colour is noticed in Ps. lxviii., 13—"The wings of a dove covered with silver"—the sheen, namely, on the wing-covers.

In Hebrew poetry it is frequently named in a figurative way. Thus the words of the Lord are "choice silver"; they are "pure words as silver tried in a furnace of earth" (Ps. xii., 6). The tongue of the just is as "choice silver" (Prov. x., 20.), the "wicked are reprobate silver" (Jer. vi., 30).

COPPER.

Copper is a very ancient metal. It is of a reddish colour and very heavy, about eight and a half times heavier than water. It is moderately hard, and is easily beaten with a hammer into any form. Copper is obtained abundantly in Cornwall, where the mines produce yearly upwards of ten thousand tons of pure metal. There are some very profitable mines near Lake Superior, between Canada and the United States, which yield eight thousand tons per year of pure copper. Copper is usually found, mixed with other substances to form an ore, in veins among rocks. It is most probable that all copper, including the great lumps of pure native copper, were once in the form of ore, or combined with native substances. The rocks close to which the native copper is found, were forced into the earth whilst in a molten state, and their intense heat affected the copper ores close by. The substances combined with the copper to form the ore were destroyed by the heat, and the pure metal remained.

The ores of copper are known by the following various names:—Native copper; white, grey, black, red, and variegated copper ores; and as copper glance, malachite, azure copper, black oxide of copper, atacamite, copper mica, copper pyrites, and the like. The forms most available in modern commerce are the copper pyrites, the grey and the azure copper ores. To prepare copper ores for market, children are employed to pick them from the rubbish with which they are mixed. The large fragments of ore are broken into smaller pieces by women, and after being again picked are given to girls, who, with a flat hammer, break the copper ore into pieces not larger than the tip of the finger. These pieces are crushed still smaller by passing them under a wheel, or they are bruised by heavy weights or hammers in a stamping-mill, while a stream of water runs through the broken ore and carries with it all that is sufficiently bruised. It is next shaken in a kind of iron sieve while under water, the earthy matter is washed away, and the copper which remains is piled up for sale.

The ore, being picked and broken, is heated in a furnace. It is next melted in a smaller furnace, when the metal falls to the bottom, and the kind of cinder which separates from it is cast into masses, and used like bricks for building.

The copper is next poured into water two or three times to separate impurities, which are chiefly sulphur, iron, and arsenic. It is then cast into long pieces, which are broken up, roasted, and melted with charcoal in the refining furnace; lastly, it is cast into solid cakes, or rolled by a mill into sheets, which are sent in ships to the different markets.

Copper unites readily with some other metals. With tin it forms bell metal and bronze. With zinc it makes pinchbeck and brass. With tin and nickel it will also form German silver.

Copper is sometimes hammered into very thin leaves to imitate gold leaf. It is this mock gold which is laid on gingerbread, which

children should beware of eating, for the copper covering or "gilt" is poisonous. Copper is also much used in manufacturing various vessels, such as kettles and saucepans, which are the bright and ornamental, as well as useful, furniture for the kitchen. A great quantity of copper is made into plates for engravers. Sheet copper is extensively used for covering the bottom of ships, to defend them from sea-worms, and preserve them from decay by water.

The large boiling vessels which you see at home called *coppers* are made of sheet copper. And, then, our penny pieces, halfpenny pieces, and farthings are largely made of copper. The copper is rolled into sheets, out of which the round pieces are cut by a press; and by another press both sides are stamped at the same time with the patterns, or dies, out in steel. At each press thirty thousand penny or halfpenny pieces may thus be stamped or coined in a day.

David provided an immense quantity of copper for the use of the Temple. Of this substance all sorts of vessels were made for the Temple, as they had been for the Tabernacle; and to these may be added weapons, more especially helmets, armour, shields, and spears. Inscriptions on copper, various utensils, and figures of lions in solid metal have been exhumed from the ruins of Nineveh. Tools, daggers, arrow-heads, and armour were formed from the ore, as was commonly the case among Asiatic nations, while the metal in powder was used to colour the bricks and ornaments in the Assyrian palaces.

TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CHAPTER III.—"A FRIEND IN NEED."



TOM'S mother was buried in a parish coffin and a pauper's grave. We must pass over many of the incidents that might be recorded here if we were making a book instead of writing a short story for boys and girls. We pass on, therefore, just observing that for several weeks after his mother's death Tom had a very hard time of it. When he could earn a few coppers by doing any odd job he was always ready to do so. Sometimes he earned sufficient to procure food and lodgings; this, however, was but seldom. He passed many nights in outhouses, and days in rambling about to find bread. His manner of living, or rather existing, is simply indescribable.

When his mother had been dead some weeks, it occurred to him one day that if he could get to his aunt's—his father's sister—he might get her to take him in.

Tom had once seen that lady, and, though he had no very pleasant recollections of her, he determined to try and find her. She lived in

a large town, which for convenience we will call Liverpool, though that is not its real name. This town was quite sixty miles off. After making several inquiries about the way, he started upon his journey without a penny in his pocket, a shoe to his foot, or a mouthful of bread to eat.

Starting early next morning, he soon left the town behind him, and travelled for some hours along the country road. He passed many happy-looking children on their way to school. More than once he looked wistfully into the cottages he passed. Now and then, through an open door, he could see blazing fires, easy-chairs, and the appearance of plenty. But, alas! they were not for him. It is our duty as far as possible to be content and thankful for the position in which God has placed us. It may be easy to do this when we have all the comforts of life. But let our lot be like Tom's, and we may find it hard to be content then. Still, we should try to remember that—

“ God will never leave us,
All our wants He knows,
Feels the pains that grieve us,
Sees our cares and woes.
When in grief we languish,
He will dry the tear,
Who His children's anguish
Soothes with succour near.”

About noon, Tom sat down hungry, cold, tired, and footsore. A few country people passed him. How he wished himself in the place of any one of them. When he saw a boy with good clogs on his feet and clothes on his back, you cannot blame him so much for looking with an envious eye upon him.

After sitting for some time, there came up to him a healthy-looking boy about Tom's own age. “Are you hungry?” said the strange lad. “I am both hungry and cold,” said Tom. “Then why don't you go home?” said the boy. “I have no home,” said Tom. “My mother is dead, and I have no place in which to live.” “Then come with me to my mother,” said the kind-hearted country lad; “I am sure she will give you some bread, and you can warm yourself by our fire.” The two started together; one glad that he was about to have bread and warmth, the other equally glad that he was the means of getting it for him. “He that gives blesses twice,” him to whom he gives and himself in giving.

Boys should never forget this. And there are two or three other lessons which you may learn here. First, to thank God for giving you kind parents, good homes, and warm clothing.

“ Not more than others I deserve,
Yet God has given me more;
For I have food while others starve,
Or beg from door to door.”

Second, to *pity* and *help* those who have not these blessings. If you see a poor boy or girl, instead of laughing at them, as I have seen some boys do, try to help them, remembering that the Bible says: "He that giveth to the poor, lendeth to the Lord."

Tom was led to the home of George Strong, where he received a kind reception, a good warm, a clean wash, and a good meal, the first he had had for many a day. Mrs. Strong was poor, but kind; she, too, was a widow, but had a few good friends, and was kept from want. She listened to poor Tom's tale with all a mother's feelings. And when he told how he had slept under archways or in outhouses, she could not help weeping. She felt as though she would like to do something for Tom, but was too poor to keep him with them. She determined, however, that he should stop that night. When she told him this, the poor lad was too full to thank her, but burst into tears, "and felt the thanks he could not speak."

George was delighted that Tom could stop. "You shall share my bed," said he. That was one of the happiest nights Tom had spent since his mother's death. George and he grew as intimate as if they had known each other all their lives. Bed-time came, and the two boys, bidding the widow good night, went to their room. After shutting the door, George was about to undress quickly and get into bed.

"George," said Tom, "don't you read first?" "Read what?" asked George. "Why, the book that tells about Jesus, and angels, and heaven," said Tom. "No," said George; "do you?" "Oh, yes," said Tom. "I promised my mother that I would read it every day. She said that if I did and was a good boy, God would take care of me. I have never missed reading this book since she gave it to me on the night she died. I try to be good, but sometimes I have been very wicked." "I should like to hear you read that book," said George. "Very well, you shall," said Tom, as he opened the small Testament which our readers saw his mother giving to him. They sat on the side of the bed while Tom read several passages which he could understand best and had read most. He read of Jesus blessing children—the many mansions—and the account of heaven in the last chapter of Revelations. All this was comparatively new to George. True, they had a big old Bible which had belonged to his grandfather, but it was seldom opened, unless they wanted to see the date of someone's birth or death written under the cover. It usually stood on a little table, with sundry other books placed upon it, and a small white cover over the lot; just as we can see it, almost any day, in many houses.

George asked many questions, some of which Tom could answer, but some he could not. In earlier days he had been a Sunday-school scholar, and had not forgotten the good things which his teacher had told him. He now found some of them useful whilst talking to George. George was so much interested in what he heard, that he wanted Tom to teach him how to pray to

Jesus. The two fatherless boys knelt together, and a few simple words of prayer were offered by Tom, but not too simple for God to hear. They got into bed, and George said he would always read about Jesus in future, and never go to bed without praying to Him. Soon they forgot their joys and sorrows, for

"Sleep, gentle sleep,
Nature's soft nurse,"

took them in her arms, and gently watched over them in their season of forgetfulness.

OUR SUNDAY-SCHOOL ALBUM.

BY ENOCH GRATTON.

(Continued from page 45.)

IX.—MR. JOHN BLUNT.



ON the next page of my Album you may see the portrait of Mr. John Blunt, the teacher who always "speaks his mind," and who often grieves and wounds the minds of others. He tells you boastfully that he is one of your straight-forward, outright, fearless men. He has no idea of mincing matters to please anybody. If he can only catch someone in a fault he is in his glory, for then he lays about him right and left. He does not believe a bit in palaver and squeamishness. In fact, to use his own words, he is "a real John Bull." Well, perhaps our friend has in him too much of the bull and too little of the lamb, too little of the meekness and gentleness of Christ. He has, you may see, not the most winning and agreeable face. He is too apt to gore people with his grievances, too apt to blurt out the cutting and rasping word and keep back the word that is cheering and tender. His speech is not always with grace, seasoned with salt. The churlish manner and snappish tones have done much to repel those who loved to be quiet—who were not thick-skinned, whose feelings were not petrified into indifference and contempt.

He does not believe much in praising anybody (except himself for his outspokenness), for that might make men vain and conceited; and he seems to have got a special commission from somewhere to keep everybody humble and in their right place. When he does praise, the words come in drops, few and far between; but his blame comes in buckets and showers. He keeps part of the commandment, "*speak the truth*," but he omits part, "*speak the truth in love*." Whatsoever things are true, and honest, and just, he remembers, but he too often forgets the things that are "lovely" and of good report.

Rarely is his "the soft answer that turneth away wrath." Mr. John Blunt is willing to work. He attends to his class regularly, and is usually in time. He knows what the rules of the school require, and often reminds others of their requirements. He is sober, just, and reliable, and by many he is respected and trusted; but I cannot say that he is *beloved*. He might be, and *would* be if, in addition to stern and rugged honesty, he would acquire more of the "beauty of holiness" and practise more fully this precept, "Be kindly affectioned one to another with brotherly love." While we should all be fearless and true to the core of the heart, we need not be harsh and unkind.

Speak gently! it is better far
 To rule by love than fear.
 Speak gently! let not harsh words mar
 The good we might do here.
 Speak gently to the little child,
 Its love be sure to gain.
 Teach it in accents soft and mild,
 It may not long remain.
 Speak gently to the erring, know
 They may have toiled in vain;
 Perchance unkindness made them so,
 Oh! win them back again.

X.—MR. CHARLES BIGGER,

Is the name of the young gentleman whose likeness you see on the next page of our Album. He was brought to school when very young. He was moved up from class to class, and at last he almost moved himself off. He reckons to have some connection with the school yet, but it is very slender. His name is still on the book, but his face is rarely seen in the class. He never seemed to be *thoroughly* interested in the Sunday school; he did not fairly grasp the great truths of the Bible. He read it and heard it, but it was never deeply imbedded in his heart, never enthroned upon his conscience or will, never interwoven with the fibres and passions of his inmost being. His dealing with the truth was slight and superficial. The seed fell upon stony ground—ground that had hard blocks of stone underlying a thin layer of earth. So the seed could not grow, because it had not depth of earth. But Mr. Charles Bigger was not without some sense of his own importance. He never liked to sit with boys younger and smaller than himself. He was always glad when the time for promotion came, for he did not form strong attachments to his teachers, and was not sorry to leave them. At last he began to stay away frequently. He was visited, questioned, entreated, but all that could be got out of him was that he was "too big now to come and sit with a parcel of youngsters." What he said with his lips he confirmed by his whole conduct and bearing. Was it not a shame to *ask* him to come to school? Why, he was nearly nineteen years old, he had now done wearing round jackets; soon he hoped to have a tall hat; further, he had begun to smoke, to order

a glass of wine or beer on his own account. On his lips you may see a little soft down; in his pockets there is a quantity of "spending money" all his own. He has begun to call his parents, not mother and father, but the old woman and governor; and if they attempt to check or reprove him, he turns up his nose and says, "I can keep myself." Now, when you consider all these things—his age, *nineteen*, mark you, his attainments and prospects—is it not an insult to expect *him* to come and sit with a lot of youngsters? He is not too big to learn many lessons of vice and folly—not too big to drink and gamble and scoff—not too big to stand at the corner of streets, to stroll in lanes or fields on the Sabbath-day, to join bad companions, and thus go from bad to worse himself. All this may seem to him manly and brave; really it is low and mean and false. True manliness is made up of intelligence, purity, love, and heroism. My dear young friends, let me entreat you never to turn your backs upon the Sunday school. There you have met with much kindness, been taught precious truth, and pointed to eternal bliss and purity. However big and strong and wise you may become, if you had the strength and stature of Goliath, and your mind was as large and vigorous as that of Milton or Shakespeare, there would still be much to learn; and if others have taught you, it is but fair that when you have the ability you should teach others. "Freely ye have received, freely give."

Before we turn to the next page, I should like to tell you a story which I once heard about a noble boy who went to sea. The owner of the vessel in which this boy sailed said to him before the voyage was commenced, "Now, I want you to promise me that you will never leave the ship." The boy promised. When far away from home the vessel was in danger. The sailors said, "Let us leave the ship and look after our own lives." "Not so," said the lad; "I promised to stick to the ship." "But the ship will go down," said the men. "Never mind," said the boy, "I shall not leave her." "But you will be drowned, and we shall leave you here alone." "Well," he replied, "I will not leave the ship." The men did forsake the vessel, taking what they could with them. But by the good and mighty help of Him who "rules the raging of the waves," the ship reached the port in safety. The brave boy kept his word and stuck to the ship. My young friends, let me again entreat you to stick to your Sunday school. Others may be too big, or too busy, or too important to come, but let all who read the JUVENILE INSTRUCTOR hold fast lovingly and resolutely to the Sunday school.

"PLAYS LIKE A CHRISTIAN."

"A LITTLE boy hit one of the true proofs in a remark about his girl playmate whose heart and conduct had been changed. Said he—
"Mother, I know that Emma is a Christian."

"What makes you think so, my child?"

"Because, mother, she plays like a Christian."

"Plays like a Christian?" said his mother; the expression sounded a little odd.

"Yes," replied the child, "if you take everything she's got, she don't get angry. Before she was selfish; and if she didn't have everything her own way she would say, 'I won't play with you, you are an ugly little boy!'"

ADDRESSES FOR JUVENILE MISSIONARY MEETINGS.

I.

My dear friends, as you know, we are now met to hold
Our Juvenile Missionary Meeting,
And I trust I may wish you, without seeming bold,
A right hearty juvenile greeting.

And as this is a juvenile meeting, of course,
You will not think it very surprising
That we young folks are called on in turn to discourse,
And we hope you won't laugh at our rising.

We, of course, don't expect to be able to preach,
And I think it is hardly expected.
We shall try just a few mission lessons to teach,
And we hope they will not be rejected.

So to-night you'll have young folks to speak or recite,
And young folks to help you to sing,
And afterwards, if I understand right,
The collecting-plates round we shall bring.

Perhaps some will say we ought to have had
A boy to preside o'er this meeting;
But among my schoolfellows I don't know a lad
Who for *chair-boy* would think himself fitting.

There's one fact, however, which satisfies me,
And 'tis clear to the veriest dunce,
That no matter how old our chairman may be,
He must surely have been a boy once.

So, while young folks and old folks together conspire
The cause of their missions to plead,
I hope your benevolent hearts will catch fire,
And prompt many a generous deed.

I am told I'm expected to-night to appeal
For your help, on the general ground
That as Christians we ought for strangers to feel,
And to help them are equally bound.

I know there are some who will stoutly deny
We've a right foreign missions to send,
While at home there's such misery meets every eye,
And so many great ills to amend.

I know the old adage says—"Charity should
Begin at our homes;" but, of course,
It does not mean we ought to limit its good,
Or exhaust there its life-giving force.

I imagine, if foreign missions should cease
(Which I hope may not be in my day),
Our home mission funds would have little increase,
Notwithstanding what these people say.

And then there are some who will boldly maintain
That the heathen don't need our assistance—
That they'd do quite as well if there never had been
A missionary cause in existence.

And others there are, while admitting the need
For evangelisation abroad,
Will deny that our own particular creed
Is one likely to do them much good.

Now, if you all offer to-night in excuse
Any one of the arguments stated,
Our mission'ry meeting will be of small use,
And not gain what we anticipated.

But if you can feel for the sorrows and woes
Which abound in idolatrous lands,
If gross superstition you wish to depose,
And release its poor slaves from its bonds,

And if you believe that the Bible contains
Great truths to enlighten and bless—
That religion has power to sever their chains
And relieve them from greatest distress—

Oh, help us to-night by your prayers and your purse
To send out our missionary bands,
With the hope of revoking the terrible curse
Which rests on idolatrous lands.

Oh, help us, dear friends, to send far away
 Christ's mission of peace and good will.
 If you wish to assist us, you everyone may,
 And I firmly believe that you will.

TOM BROWN.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

MARCH.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
4 Care and Trust	Matt. vi. 19—34...	1 Pet. v. 7.
11 The First Missionaries ...	Matt. x. 1—15.....	Mark vi. 12.
18 Christ's Forerunner	Matt. xi. 1—15	John v. 35.
25 The Forerunner Slain	Matt. xiv. 1—14...	Rev. ii. 10.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
4 The Story of Naboth.....	1 Kings xxi. 1-19..	Ver. 20.
11 Elijah translated	2 Kings ii. 1-11....	Ver. 11.
18 The Spirit on Elisha.....	2 Kings ii. 12—25	Ver. 15.
25 Review of Quarter's Lessons.....		Isa. xlv. 21.

APRIL.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
1 The Resurrection from the	1 Cor. xv. 41—58..	Ver. 2.
8 Peter's Confession [Dead	Matt. xvi. 13—28.	Rom. x. 9.
16 The Young Ruler	Matt. xix. 13—30..	Luke xviii. 22.
22 Christ's Entry into Jeruslm.	Matt. xxi. 1—13 ...	Zech. ix. 9.
29 The Barren Fig-Tree.....	Matt. xxi. 14—27.	John xv. 8.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
1 The Oil increased	2 Kings iv. 1—16..	Ps. lxxii. 12.
8 The Shunammite's Son ...	2 Kings iv. 18-37..	Matt. xv. 28.
15 Naaman the Leper.....	2 Kings v. 1—14..	Ps. li. 7.
22 Gehazi the Leper	2 Kings v. 15—27.	Prov. xv. 27.
29 Elisha at Dothan	2 Kings vi. 8—23.	Ver. 16.

OUR PRIZES.



ACCORDING to promise, we send this month the books awarded to our young friends for their answers to the questions and puzzles furnished during the last year. We have done our best to find books suitable for them, and worthy of their acceptance. Had they been personally known to us we should have been better able to have judged what would have met their taste and desire. However, we hope none will be greatly disappointed in what they receive.

If we tell our young friends a secret, will they keep it to themselves? How can we, perhaps, some reply, for in telling us you also tell everyone else who reads the magazine? Now that did not strike us till we had written the question down. However, it does not signify; we will tell our secret without any condition of the kind suggested. It is this: We take great interest in this business of questions and answers from a recollection of what befell us when we were very young—nearly as young as the youngest who answers the questions in our INSTRUCTOR. Children's magazines then were very scarce, and very different in their character to what such magazines are at the present day, and very few were to be had for a penny. We subscribed to one published by Mr. Winks, of Leicester, who belonged to the Baptist denomination. In this magazine a prize was offered to the boy or girl who gave the largest number of Scripture passages proving the divinity of Jesus Christ. When we read it we thought, we can win that prize if we try, and so we did try. But did we win? Well, we must answer both yes and no. We told no one of our intention, but worked away in secret till we thought we had got all, or nearly all, the passages in the Bible which showed that our Saviour was divine. Then we wrote them out on a large-sized sheet of paper, and in as neat a hand as we could. And now we had to save our pennies to get enough to pay the postage, for letters cost something in those days. Besides sending the Scripture passages we had selected, we thought we would send a few verses on Heaven, which we had written for insertion in the magazine. When all was despatched—and we had to walk four miles to post the letter—we wondered what the result would be. Should we get the prize? Would they print the verses? These questions were in our thoughts continually, and sometimes we were glad for what we had done, and sometimes we wished our letter had never been sent. But, in due course, our suspense ended. The magazine, which was to us as the book of fate, came, we opened it eagerly and anxiously, and there we saw the verses with our name at the end of them. But the prize? Ah, that we had missed. Our selection of passages was the most judicious, but the prize was offered for the largest number of passages, and so it went to another.

We confess to having been much disappointed, and we are not sure that we did not shed a few tears over it. But we soon got

better of this feeling, and were glad we made the trial though we did not attain success, for we were amply compensated for all our trouble by the Biblical knowledge we had gained through searching the Scriptures.

This little story of ourselves we intend as a parable for our young friends whose names do not appear on the list as prize-takers. Though we have not the pleasure to give them a book, nor they have the pleasure to receive one from us, we hope they will find that they do not go without their reward for what they have done in trying to win one. Let them try again, and their perseverance will in the end be very likely crowned with success.

We have a few things to say to those who send answers, to which we hope they will attend. In the first place, all answers must be addressed to the REV. J. HUDSTON, BALTIC LODGE, EVERTON ROAD, LIVERPOOL. Let all take particular notice of this. Secondly, in giving the answers, not only the word must be supplied, but also the place in the Bible where it occurs. Attention to this is necessary to getting a prize. The answer to the enigma in January, which is given next page, will show what we mean. Thirdly, those of our correspondents who have not given their ages, must do so. Most have done it; the few who have not will, please, give the information the next time they send answers.

Because our young friends receive their prizes this month we have given a picture of a prize distribution. Of course, it is not a correct representation of the twenty to whom we have sent books, for it will be seen that there are no girls among them.

And now, to all of our dear young friends, whether they have gained a prize or not, we send our kind love and good wishes. While those who have succeeded we hope will not be made proud by their success, those who have not succeeded must not thereby be discouraged. Let all resolve to do their best for the future, and in making the effort they will obtain a blessing which will repay them.

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

SCRIPTURAL ENIGMA.

1. A CITY that once Kirjath-arba was named;
2. The tenth judge of Israel, for family famed.
3. A mountain in Ephraim whence blessings proceed;
4. A temple-musician, quite noted indeed.
5. A mountain whence Balaam surveyed Israel's host;
6. Sennacherib's chief, who vainly did boast.
7. He who was the son and successor of Saul;
8. He whom, as a prophet, Elijah did call.
9. The son of Elkanah, and priest of the Lord;

10. The king who did Absalom refuge afford.
A minister of holy things
Among the Jews, the initials brings.

ANSWER TO ENIGMA IN JANUARY.

1. E-uphrates, Jer. xiii., 5.—2. U-lai, Dan. xiii., 2.—3. R-amah, 1 Kings xv., 17.—4. O-ak, Gen. xxxv., 8.—5. C-aleb, 1 Sam. xxv., 3.—6. L-aban, Gen. xxiv., 29.—7. Y-outh, Job xxxvi., 14.—8. D-an. Ex. xxxviii., 23.—9. O-nesimus, Col. iv., 9.—10. N-ehushta, 2 Kings xxiv.

EUROCLYDON, Acts xxvii., 14.

BETHESDA BAND OF HOPE, PENDLETON, MANCHESTER.—On Saturday evening, the 14th Oct., this society held its sixth annual meeting, when we were honoured and gladdened by the presence and support of all the three ministers of the Circuit, viz., the Rev. J. Young (resident minister), who presided over the meeting, the Rev. T. Scowby (Superintendent of the Circuit), and the Rev. W. F. Newsam, all of whom gave earnest and instructive addresses on the teetotal question—a question which, happily, seems to become daily more and more “the” question of the day. The meeting was further plentifully supplied with recitations, interspersed with melodies by the Band of Hope Choir, and which, on the whole, gave great satisfaction to an audience filling the schoolroom. The society has taken 918 pledges since its formation, and has now 258 subscribing members on the books. It may, perhaps, be interesting to know that, except in one or two instances, the committee (acting upon the maxim that “God helps those who help themselves”) has never gone outside its own borders for speakers at the ordinary monthly meetings, but each member has “addressed” in turn, and that still the supply is fully equal to the demand; in fact, as the committee has now received a fresh accession of earnest young men to its number, there are several members who have not yet had an opportunity of astonishing us with a display of their oratorical powers. With an expression of gratitude to God for past, and of hope for future, success—I am yours truly, JOSEPH TAYLOR, *Secretary*.

EBENEZER SUNDAY SCHOOL, BARNSELEY.—We held our yearly tea-meeting on New Year's Day, when about two hundred sat down to well-filled tables. The trays were presided over by Mrs. Atkinson and Misses Carroll, Buckley, Worral, Hammerton, Taylor, Goodyear, Woodruff, Ashworth, Mallinson, Grey. After tea a meeting was held in the large schoolroom under the chapel, which was tastefully decorated with evergreens, flowers, mottoes, &c.; the latter were all enclosed in neat banners, and were the gift of Mr. D. Fish, of Halifax, formerly one of our co-workers in the Sunday school at Barnsley. The Rev. S. Smith presided. After a hymn had been sung, the chairman offered prayer, and then called upon Mr. Earral to give the report, which was satisfactory. The chairman then called upon Mr. Thomas Nall, teacher of the Young Men's Bible Class. Messrs. Geo. Kaye, E. Liversedge, Wm. Potter, and J. Evers also addressed the meeting. The chairman then called upon our junior teachers, D. Bailey, J. Wainwright, S. Haden, and J. Cooper. All of them gave instructive addresses. Our gathering this year had additional interest, in consequence

of two beautiful marble timepieces being presented to our superintendents, who have held their posts for a great number of years. Our senior superintendent, Mr. Thos. Taylor, has been in office over twenty years, and our respected brother Mr. Wm. Woodruff has held his for a long period. The Rev. S. Smith in making the presentations alluded to their services since he came to Barnsley about five years ago. He then read over the inscriptions, which were as follows:—"Presented to Mr. Thomas Taylor by the teachers, scholars, and friends of the Ebenezer Sunday school, as a token of the esteem in which he is held as superintendent of that school. January 1st, 1877." The inscription on the timepiece presented to Mr. Woodruff was the same, with the exception of the name. They cost about £10. Both gentlemen thanked the teachers and scholars in very interesting addresses. The choir, led by Mr. Grey, during the evening sang several appropriate pieces. Mr. Vere presided at the harmonium. On the motion of Mr. J. G. Firth, seconded by Mr. Geo. Goodyear, a cordial vote of thanks was awarded to the ladies for presiding at the trays, to the singers, speakers, and chairman.—Geo. WARDLEY.

ANDOVER STREET SCHOOL, SHEFFIELD.—On Friday evening, Dec. 29th, 1876, the members of the Young Men's Bible Class presented to Mr. T. Maskill, their late teacher, as a token of regard, a beautiful silver-plated inkstand, bearing the following inscription:—"Presented to Mr. T. Maskill by the members of the Andover Street Methodist New Connexion Young Men's Bible Class on his resigning the superintendency. December, 1876." Mr. Maskill has since been appointed assistant-superintendent of the school, where we wish him health to labour for many years to come, trusting his efforts may be crowned with success, and when he shall have finished his labours here we hope he will be found on God's right hand, there to wear the honours of faithful service for ever.—L. GALLIMORE, Secretary.

SHERIFF HILL, GATESHEAD.—Our Zion has been in debt for about forty years. The year before last we determined the debts should be removed. £20 was paid off last year. As soon as the anniversary in September was over, we commenced with a right good will our sewing meetings. The secretary opened a subscription-list, which was successful. The ladies were busy at early morn and at the midnight hour, working with the needle. The day arrived. The sun refused to shine, there was a continuous downpour of rain, but the village turned out, and the schools (kindly lent by the Church) were crowded in every part. A Christmas-tree, a toy stall, a stall with articles useful and ornamental; also a tea, presided over by the following ladies—Misses Scott, Mrs. J. Miller, R. Charlton, D. Bradshaw, Mackey, A. Scott, Cooke, Snowden, Miss Wake, and Master W. Scott. The proceedings were opened by Rev. B. S. Chambers giving out a hymn, who called upon Rev. A. Smith to pray. Richard Cail, Esq., J.P., delivered an appropriate address. The result of the effort is £60 burden is removed from the chapel, with a £100 left for us to remove next year. The Lord being our helper we will do it. Pray for us.—A. S.

ZION BANK, LEEDS.—On Sunday, January 14th, 1877, we held our annual juvenile missionary meeting in connection with our Sunday school. The attendance was very good. The meeting was presided over by our esteemed friend Mr. J. W. Dixon, from Woodhouse Lane School. The report was presented by the secretary, after which a series of suitable

addresses were delivered by our esteemed minister, the Rev. E. Bamford, and Messrs. J. Walker, J. Bradford, W. Sunderland, and R. Wood. A collection was made at the close on behalf of the missions.—H. W. HEMSWORTH.

SALEM SUNDAY SCHOOL, BELFAST.—The annual soirée in connection with the above school was held in the schoolroom on Wednesday, January 31st, 1876. After a bountiful supply of tea, fruit, &c., the meeting adjourned to the church, where the Rev. R. O. Turner occupied the chair. The parents and friends of the scholars were assembled in the church to witness the distribution of prizes for attendance and conduct during the year, and answers to questions on the history of Moses and on the parable of the Prodigal Son. After the distribution the programme was gone through, which consisted of a dialogue by Samuel Spence and Thomas Rodgers, recitation by Edmund Fittis, and several pieces of music by the choir, which were very attractive. The following sums were collected by the juveniles in aid of the missions:—Eleanor McConnell, £1 4s.; John Millar, £1; M. E. Thompson, 16s.; M. E. Dornan, 12s.; M. M. L. Weir, 10s.; James Watt, 8s. 11d.; Ellen Smyth, 8s. 7d.; Frank Turner, 8s. 6d.; Samuel Neil, 7s. 5d.; Alice Cowan, 6s. 9d.; Walter Surginor, 6s.; Elizabeth Mercer, 5s. 1½d.; Julia Harrison, 5s.; Mary Wharry, 4s. 1d.; Henry Gracey, 4s.; W. J. Larmour, 4s.; M. A. Sherry, 4s.; Lizzie Hill, 3s. 3d.; M. J. M. McDowell, 3s. 2d.; Lizzie McGahey, 2s. 6d.; Lettie Hingston, 2s. 6d.; Charles Turner, 2s. 6d.; Isaac Doran, 2s. 4d.; Elizabeth Neil, 2s. 3d.; Lizzie Bailie, 2s. 1d.; Sarah Potts, 2s.; Letitia Wilson, 2s.; Lizzie Gracey, 2s.; Sophia Bailie, 1s. 8d.; Lizzie Lemon, 1s. 6d.; Jane Brown, 1s.; Mary Robinson, 1s. Total, £9 6s. 1½d.—J. McC.

BAND OF HOPE UNION.—A panorama illustrating "Nelly's Dark Days," and other interesting stories, has been exhibited during six weeks of the winter in connection with twenty-six Bands of Hope and seven Sunday schools. The aggregate attendance was nearly 7000 persons, and about 150 were reported as having signed the pledge. New societies have been commenced at Longton, Hooley Hill, Silverdale, Old Town (Barnsley), Paddock, and other places.—D. HEATH, General Secretary.

BRUNSWICK CHAPEL SUNDAY SCHOOL, LONDON.—On Sunday afternoon, February 4th, prizes were awarded to those scholars who had collected for the juvenile missionary New Year's offering. They consisted of handsomely-bound books on subjects adapted for Sunday-school scholars; and were given, as heretofore, by our worthy treasurer, Mr. Lee. The amounts were read over, and Mr. A. Howard, after encouraging those who had collected to do so again, and advising those who had not to make up their minds to begin next year, assuring them that they would not only be rewarded here but in heaven also, proceeded to present the prizes. This is the fifth annual distribution, and, we are glad to report, the most satisfactory of any previous year. The names and amounts of collectors are as follows:—Miss P. Thomson, 1st prize, £2 13s.; Master Wesley Richards, 2nd prize, £2 2s. 2d.; Master Ben Haward, 3rd prize, 12s. 9d.; Master Tom Nodder, 4th prize, 8s. 10s.; Miss Amy Moreland, 5th prize, 7s.; Miss Hannah Clayton, 6th prize, 4s. 6d.; Miss Clara Nodder, 7th prize, 4s. 6d.; Master William Howard, 8th prize, 3s. 9d.; Master Henry Schofield, 9th prize, 2s. Total, £6 18s. 6d.

N.B.—The understanding was to give six prizes, but the amounts being so satisfactory each collector received a prize.

Memoirs.

—O—

JOHN EDWARD MAIDEN

Was one of the first scholars in our Sabbath school at Madeley. He loved the school, and maintained his connection with it until his death. He manifested, too, considerable respect and reverence for God's house. Born in Park Lane, Madeley, March 20th, 1857, he was nineteen years old when he died, his death taking place on Nov. 4th, 1876. Consumption, "the fell foe of youth," was the means by which he was removed from this world. His disposition was amiable. He resigned himself to God; whilst wishful to live he was willing to die. "The Lord's will be done," he frequently said during his long and trying illness.

Questioned as to his safety by a friend who visited him, he said, "I am as sure of heaven as I am of my own existence." He died at Eaton Constantine in a cab, whilst being removed from Salop Infirmary to his home at Madeley. He said to his mother, who was the only friend with him, "I am dying, but all is right. I have an interest in the blood of Christ." With these words upon his lips he passed away. His death was improved by the writer to a full congregation on Sunday evening, Dec. 17th, 1876, in our Madeley Chapel. "The blood of Jesus Christ, His Son, cleanseth us from all sin"—1 John i., 7. WM. JAMES.

TWO BRAVE BOYS.

I.

At a meeting of the Royal Humane Society, the other day, a testimonial, inscribed on vellum, describing the services rendered and the acknowledgments of the society, was unanimously voted to Edmond Waterton Coningsby Erskine, aged fifteen, the son of the Hon. J. A. Erskine, who saved two little girls named Williams, aged respectively ten and twelve, from drowning at Southsea on the 12th July, 1876. The two children rolled down an embankment which slopes down suddenly to the sea, and were at once in deep water with a rapid tide. Young Erskine, without taking off any of his clothes, plunged into the water, and after swimming a short distance came up with the girls after they had twice sunk. Seizing them by the hair, he pulled them both on his back, and in doing so was severely bitten in the hand by one of them; but he swam towards the shore as well as he could, having only recently learned to swim. He was joined by another youth, who took one of the children from him, and they ultimately got both the girls to the side of the rocks, when a gentleman named Cowan came to their assistance, and they were landed in safety.

II.

A gentleman writes to the *Spectator* to narrate a case of heroism that occurred in Nova Scotia a little while ago. Two little boys were fishing from a wharf, when one of them fell into the sea. The other, named William Francis, who had arrived at the mature age of nine years, jumped in after him, swam fifty yards in the face of the tide and in a heavy rain, which began then to fall, caught hold of his little comrade, and held him till other rescue came. The little fellow said, in amusingly boyish language, "I was almost gone myself, the water was so cold; but I am glad that I did what I did and saved him. *I lost my fishing-line, though, and my shoes and hat,* and was afraid that mother would scold me, but she didn't." Sir Cooper Key, the vice-admiral of the fleet in those waters, presented him with three sovereigns, and is going to try to get him a medal, which we must all hope the little boy will receive, and live long to wear.

Poetry.

THINGS I DO NOT LIKE.

I do not like to see a little girl
 Who will not in the morning rise,
 And have the water sweet and cool
 Refresh her face and eyes.

I do not like to see her cleanly dress
 All torn or careless look, or tossed;
 Her toys all scattered here and there,
 Her thread and needle lost.

I do not like to see her at her play,
 When other little girls have met
 To frolic, laugh, and run about,
 Grow peevish, cry, and fret.

I do not like to hear her tell a fib;
 To see what's not her own she'll take;
 Her tongue, at times, be much too glib,
 And mother's orders break.

These are the things I do not like to see;
 And now who'll try to be
 The meek and modest little girl
 Which I would like to see?

Thus I have told you what I do not like,
 I'll only stop to say,
 Perhaps I'll tell you what I love
 Upon some other day.



OUR KNOWING DOG.

HAVE DOGS INTELLIGENCE?



HIS question has been much discussed, but not so settled, that all considering it have come to the same conclusion. One would think, from the way she is speaking to it, that the little girl in the picture thinks her dog has intelligence; and, to see how knowing the *Lady*, we are not surprised at her opinion. He is as attentive to what his little mistress is saying and doing, as if he knew all about it. I have no doubt he does know a great deal, and will remember it too; of which he will give practical proof some day when his mistress requires him. The dog is often called an irrational animal, and, compared with man, it may be just thus to describe him, as, according to the poet, man's intelligence loses a measure of its greatness when compared with an angel's:—

“Superior beings, when off ~~the~~ they saw
A mortal man explain all ~~Newton's~~ law;
Admired such wi-dom in a human shape,
And showed our Newton as we show ~~an ape~~.”

Not very complimentary that to the great Sir Isaac Newton, and we do not endorse the sentiment of Pope as true, but it serves us for an illustration. Dogs may not be gifted with all the intelligence man has, yet from that it does not follow that they have no intelligence at all. In their way, and within the limits of their faculties, they can reason as well as we. The many authentic anecdotes of the dog's sagacity abundantly prove this. A gentleman told us he had a little dog which always accompanied him when he went ~~on~~ shooting. On one occasion this dog was worried by another as they passed through a farmyard. Ever after, when they were approaching the place of his ill-treatment, he would creep close to the heels of his master, nor leave him till he was out of the reach of his enemy. But one day a friend accompanied him on his shooting excursion, and he had with him a large and powerful animal. At this time the little dog never sought the protection of his master as they came to the farmyard, but he scampered off before them and acted towards the dog in a way to provoke him to an attack, knowing he had a companion who could protect him and give his old enemy a thrashing beside, which he evidently wished him to have.

Sir Walter Scott tells a curious story of one of his dogs. It one

day furiously attacked the baker, and was with great difficulty called off. But as the dog observed the baker coming every day to leave bread for the family, he began to regard him in a favourable light, and in time the dog and baker became great friends. One day Sir Walter was telling somebody how the dog had attacked the baker, and immediately he began the story the dog curled into the corner of the room, turned his face to the wall, hung down his ears, and lowered his tail, and displayed every sign of being heartily ashamed of himself. But when Sir Walter came to the end of the story, and said, "But Tray didn't bite the baker," the dog turned round in a moment, jumped and frisked about, and was evidently quite restored to his own good opinion. To try the dog, Scott repeated the story in different tones of voice, and in the midst even of another conversation, but it was always the same. Directly he began the dog crept into the corner; but when he came to "But Tray didn't bite the baker," he always capered back in triumph.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 13.

From BEN BARLOW to MRS. BARLOW.

Waterside House, Worcester,
March 17th, 187—.

MY DEAR MOTHER.

Your kind letter made me feel very serious. I am so sorry I have made you anxious, for I know now, more than ever I did at home, what a dear, loving mother you are. I really will try to do better at my lessons. Perhaps I might have said more about them, but they are such dry things that I never care to talk or write much about them after I have done with them.

The mud on my clothes was caused by my getting upset into the river—it was only a few inches deep just there. I was out again directly, and am none the worse for it. You know, dear mother, even if it had been in the middle of the river, I should have been all right, for last summer father would have me learn to swim with my clothes on at Hammerthorpe Baths. My things would not have looked so bad, only one of the boys advised me to try to wash them.

Do not be anxious about me, dear mother. I will take care not to

get hurt, and will also try to be as good as you would wish me. Give my love to father, to Clara and Helen, to Bob, and to all inquiring friends.—I remain, my dearest mother, your ever affectionate son,
BEN.

Letter No. 14.

FROM DR. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne,
March 14th, 187—.

MY DEAR BEN,—

What is this I hear from your mother about your falling into the river? You must have been knocking about in a very foolish and dangerous way for you to get upset. I hope you were not quarrelling or fighting. You know I thoroughly dislike fighting. If you had been in mid-stream instead of at the side, and you had not been a good swimmer, why, of course, you would have been drowned. Let me know all about it, and mind and keep out of mischief.—With best love, your affectionate father,

OLIVER BARLOW.

Letter No. 15.

FROM BEN BARLOW TO DR. BARLOW.

Waterside House, Worcester.
March 18th, 187—.

MY DEAR FATHER,—

I got your letter two days ago. I am sorry to say we *were* quarrelling in the boat. One of the fellows wanted to row "stroke" oar. I was in the seat first and wouldn't give up, so he knocked me over the side. I thought of what you said about fighting. You will recollect you said it was sometimes right to fight. And I thought you wouldn't like to see me stand to be knocked about by a big, bullying fellow if I was able to take care of myself. So I challenged him to fight, and we fought in the boathouse. He is a head taller than I am, but after three rounds he would not stand up again. I am all right, only I got a black eye.

I hope you will think I did right. I don't think I shall ever have to fight with him again, for he has been quite civil with everybody since. Please don't tell mother or sisters. It would only put them about and frighten them. I said my Latin better to-day than I have ever done it yet.—I remain, dear father, your affectionate son,
BEN.

P.S.—I think you promised to tell me how it was Dr. Tasker got lamed. I wish you would do so in next letter. I asked Mr. Macpherson—one of the masters—but he said he only knew that it was done in the water somehow.

Be sure and not let mother see this letter—she is so timid.

Letter No. 16.

From CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,
April 4th, 187—.

MY DEAR BEN,—

Your last letter was a grand one. I read that part of it about the game at "hare and hounds" to the boys in the playground, and nothing would do but we must have a run. So last Saturday we got some old copy-books and cut them up for "scent." Tom Blunt and John Williams were the hares, because they knew the roads best, besides being good runners.

The hares started off at two o'clock, and at ten minutes past two about a dozen of us hounds followed them. It was jolly fun. There wasn't much trouble to track them, for they dropped "scent" nearly every three yards; but what put us about was, that they crossed the scent over and over again, and as we could not pick up all the bits of paper we sometimes went over the same ground two or three times, with the idea that we were following a new track.

We followed them down High Street, round Mill Lane, across Fall End Common, and through Upleigh Wood. We were in the wood for quite an hour following one scent after another. They own now that they ran in circles round the rising ground in the wood, and that they several times heard us laughing and shouting within a score yards of where they were hid behind the hill.

But the best fun was at Farmer Wilkes's, at Crop Hall, about half way to Hammerthorpe. The farmer and his men were at work hedging and ditching, but as Tom Blunt and John Williams knew him, they bolted straight through his foalyard, and got leave to run right alongside the very hedge they were mending, across the bottom of his garden, and so again into the road.

Well, when we hounds found the "scent" turn into Farmer Wilkes's yard, we all rushed through the gateway, scattering the fowls and pigs in forty directions. This started the dog, who came yelping out after us, and tore a piece from the leg of Edgar Foster's trousers—he happened to be last.

When we got through the yard we found the "scent" leading into a field of spring wheat, so over the fence we went, and, instead of keeping close to the ditch, we went trampling two or three yards into the wheat. We were tearing along in this fashion, shouting and laughing, when at a sudden turn of the hedge we caught sight of Farmer Wilkes and two of his men coming after us as fast as they could drive. The farmer was awfully angry, and vowed he would summon us all, but we, of course, took "leg bail" and managed to get clear away, all except Joe Bland, who didn't half try. But Mr. Wilkes didn't say much to him, because he had been keeping close to the hedge, and had tried to persuade the rest to do the same.

That way of playing "hare and hounds" may do at Worcester,

but if we played it here often, we should have the farmers on the look-out for us, I'm afraid.

I have to go into the shop now, so must say "good-bye" for the present.—I remain, yours truly,
CHARLIE THORNTON.

P.S.—You didn't tell me if you had turned the tables on Ted Instone. Let me know about that fight too. Of course you thrashed the fellow.

Letter No. 17.

FROM DR. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne.

April 8th, 187—

MY DEAR BEN,—

Your letter of the 18th ult. has shown me how careful parents have need to be in laying down rules for their children's conduct. I recollect I did say *once*, in answer to one of your questions, that there are times when it is right to fight. But for the *once* that I made that admission I have quite a score times warned you of the folly and wickedness of fighting in general. But there, the first time you got across with a school-fellow, you willingly forget the score of admonitions, and gladly remember the solitary admission. You jump to the conclusion that the case in question is one of those which justify a battle, and forthwith you roll up your sleeves and pitch into your adversary.

It is very difficult for me to judge accurately without knowing all the circumstances, but it certainly seems to me that you had great provocation. You say you thought I should not like to see you "stand to be knocked about by a big, bullying fellow." I certainly should not, if I thought you suffered it merely because you had not the courage to defend yourself; but, knowing as I do, that you are brave enough to protect yourself, even against boys bigger and stronger, I should have been proud to see you restrain your anger and bear the provocation calmly. You would have shown far more courage by suffering the injury, and running the risk of being called a coward for not revenging it, than you did by thrashing your bigger schoolfellow. You might possibly have conquered him by kindness.

But I don't know that you would. I have had to do with several bullying folks in my time, and, as a rule, they could only be cured by a good thrashing; and as you say your opponent has been quite "civil with everyone since," let us hope the fight did him good. But if it did, you must not take credit for it; for you knew we must not do evil that good may come of it, even in curing overbearing school-boys.

And now for future. You are just a little quick-tempered. Perhaps you inherit it from me. It will, therefore, be a safe rule for you

not to fight again on your own account if you can avoid it in any honourable way. If, however, you see those who are weaker being bullied or oppressed, then interfere at once; but be quite sure in your own mind that you do it out of sympathy with the sufferers, and not because you like the excitement of a fight.

Give my regards to Dr. Tasker. I will tell you how he got lamed the next time I have an hour's leisure.

Your mother and sisters send their love to you, in which I also join.—Your affectionate father,
OLIVER BARLOW.

Letter No. 18.

FROM BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,

April 16th, 187—.

MY DEAR CHARLIE,—

I liked your last letter very much. I hope you won't give up "hare and hounds" because of Farmer Wilkes threatening you. We often have labourers and keepers after us. That is half the fun. But we never go over the same district twice in succession, so the farmers can't get ready for us.

You ask me if I have turned the tables on Ted Instone. Well, not exactly; he is as 'cute that, though I have tried several times, I have not quite settled with him as I could wish. But there were others in the scrape besides him.

The first thing I did was to mix about half a packet of boot blacking with the water in each of the ewers one bitterly frosty night in the beginning of February. Next morning everybody had to go out in the cold for a fresh supply before we could wash. The cistern-pipe was frozen, and took about ten minutes to thaw, and you would have laughed to see us water-carriers shivering round the tap, dressed in all sorts of garments. Of course I had to blacken the water in my own jug, or they would have known who had done it.

A few days afterwards I got some holly that had been used to decorate the Doctor's entrance-hall, and stuffed a handful into the toe of every one of the newly-polished boots left on our landing. Of course I was rather late in getting up that morning, and I almost shook the bed laughing at the first who tried to put his boots on. No sooner did he push his toe into his boot than he drew it back as if he had been bitten. Then he pushed his hand in to see what it was, and snatched it back quicker than his foot.

Ted Instone was next, but he saw this other boy looking in his boot, and guessed something was wrong; so he carefully examined his, and got the holly out without so much as a scratch. He quickly charged me with the mischief, and then stood on one side to share the fun of seeing the other fellows find out the trick.

The next morning it was awfully cold, and there had been a fall

of snow during the night, so Ted and I got up early for a scamper across the meadows. As we were going out I saw the other boys' boots standing in a row on the landing, and it occurred to me at once to fill them partly full of snow. Ted agreed, and we rammed the toe of each boot hard up with snow, which froze like ice almost directly. Among the rest were Jack Caswell's boots—that was the fellow I afterwards fought—and Ted wanted me to miss his. He is a big fellow, and everybody was afraid of him; but Ted had previously told me that it was he who put the string and pan of water ready for me, so I was determined to serve him out.

When we came back there was a pretty hubbub. All the boys who slept on our landing had had to put fresh boots on, and some had got their socks soaking wet trying to push their feet through the snow. We never thought of it at the time, but as we were the only two up before the rest, they knew at once who had done it, and they also charged us with putting the holly in their boots. Jack Caswell raged and stormed fearfully, and there would have been a scrimmage, only the master just then called us to lessons. In the dinner-hour the bother began again, but Ted laughed it off, saying one good turn deserved another, and we all got pretty friendly, except Caswell, who would not be sociable.

About a fortnight later we had some bright, sunshiny weather on the Saturday, and a few of us went down to the river to have a row. There were very few boats launched, but there was a four-oared one we had bargained for a day or two before. As soon as we got in sight of the river we had a race for choice of seats. I got first and took the "stroke" oar, but directly Jack Caswell came he ordered me to get up and let him row "stroke." Almost any of the other boys would have given up at once—for he is a great bully—but I meant to keep my place if possible. He grew white with rage, and tried to take the oar from me. We had a sharp struggle for it, and at last he jerked me straight overboard into the river. It was not deep, of course, for we had not pushed off, but as I fell on my side, I was wet to the skin, besides staining my clothes with mud.

I could not stand this, so I got out and challenged Caswell to fight. We went into the boat-house out of sight, and went at it for three rounds. The other boys were delighted to see me beat him. I only got a black eye. I soon found out that, though strong, he was frightened. He was glad to give in after the third round, and I don't think any of them will be afraid of him again. You see, when he first came to Worcester, he was a great big fellow, and he boasted and blustered a lot, and the lads at once thought he was a terrible fighter, but now they know he is only a coward at bottom.

As we were putting on our jackets who should come over the ferry just below but Mr. Macpherson. Of course he reported us to the head-master. Dr. Tasker read us a lecture on fighting, and gave us extra lessons as a punishment.

Mother and father found it out because of my clothes being

stained. They would not been a quarter so bad, only Ted Instone advised me to get a packet of washing crystal and wash the dirt out before I sent them home. I did as he told me, but instead of getting the stains out, it spread them; and when Ted saw what a mess I had made of them, he did nothing but laugh at me.

Father says he wishes I had not fought Caswell, but for all that I think he would have done just the same himself if he had been in my place.

Give my love to the other boys, and believe me, yours truly,
BEN BARLOW.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

IV.—NATURAL PRODUCTS—LEAD.



HAVING considered the "precious metals," we now turn to lead, which ranks high among what are called the utilities—that is, the useful metals. Lead has been known from the most ancient times. Ever since the time of Moses (and how long a time before that period it is difficult to say) lead has been in use, and has continued in use, from that time till the present day. It is stated that the Romans sheathed the bottoms of their ships with lead, and fastened it on with bronze nails; whilst the Roman ladies, like some silly females of our own day, used the carbonate of lead, or white lead, for a cosmetic. During the Roman occupation of Great Britain our lead ore formed an important article of commerce. Blocks or pigs of lead have been discovered with Latin inscriptions engraved on them; and the remains of Roman stations, villas, and cemeteries have been exhumed in the neighbourhood of the mines. After the Roman eagles had left us, the Saxons and the Old English continued to work the mines, one of which, near Castleton, was dedicated to Odin. The lead mines in the vicinity of Wirksworth have been in operation since, at least, the year 714; for we read of a sarcophagus of lead, lined with linen, as having been prepared in this locality. In the Domesday-Book the Derbyshire lead-fields are included among the demesnes of the Crown. By a demesne, you will understand a domain—a manor-house, with the lands belonging it, held by the owner for his own use. Thus the lead-fields were attached to certain manor-houses and sold or presented along with them.

In the United Kingdom lead is found and worked in Allendale and other parts of the West of Northumberland; at Alston Moor, in Cumberland; in the West of Durham; in Swaledale, Arkendale, and other parts of Yorkshire; in Staffordshire, Cornwall, the Mendip Hills of Somersetshire; the Isle of Man; in the Welsh counties of

Flint, Cardigan, and Montgomery; in the Irish counties of Wicklow, Waterford, and Down; and in the Scotch counties of Ayr, Kirkcaldy, and Lanark. But the most extensive and profitable are those of Northumberland and Derbyshire. The average annual product of lead in Great Britain is about 65,000 tons.

Nearly all the lead of commerce is obtained from a mineral called "galena," or "lead-glance," being a sulphuret of lead, and diffused, more or less, through vein-stone or "gangue," a word derived from the German *gang*, a vein. When pure, every 100 parts of galena are composed—of lead 56.55, sulphur 13.45.

Minerals, such as lead ore, are supposed to have been deposited originally in the metamorphic rocks, such as clay-slate, quartz rock, &c., and therefore very low in the order of deposition; but the same convulsions of Nature which have thrown up coal have performed a similar benevolent office for the useful minerals, which are thus brought within the reach of the industrious hands of man. When the geological survey of a county leads to the supposition that minerals are present, the miner does not speak of "boring" and "winning," as he would do if he were searching for coal, but uses other terms, such as "exploring," "shooting," and "costeaning;" and he terms the rock in which the mineral is deposited the "country," whilst the mineral itself is distinguished as the "lode." "Costeaning" is analogous to the "boring" for coal; and a number of pits, like graves, are sunk in places where the mineral is supposed to exist. The holes or pits are sunk near to each other, and at right angles, or nearly so, to the supposed direction of the lode, and, in order that no mineral may escape discovery, the pits are connected together by "cross-cuts" below.

As I write, I have lying before me a description given by a traveller of a visit which he made down a lead mine in Northumberland. Had our space allowed we would have inserted it, and then our readers would have seen that, though writers of fiction may indulge in dreams of glittering ores bestudded with flashing jewels only waiting to be grasped by the avaricious hands of man, stern reality is directly opposed to these poetical fancies. Than the inside of a mineral mine nothing can be more dismal, and to secure the minerals is, to adopt the expression of a miner, "grievous wark." But we must leave the mine and proceed to examine the works, and the

PROCESSES

by which lead is secured. When the ore comes from the mine it is in rough stony lumps, of all sizes, from the bigness of a man's head down to a grain of sand. Some lumps are slaty in appearance, resembling quartz; others are good specimens of the pale grey limestone from which they were torn; and the more they all sparkle with crystals of lead, the better is their quality. Some look as if they were *all* lead, only brighter, so cunningly is the earth masked; and these which are singularly heavy, the miners lovingly call "lazy

lumps." The ore in some localities bears the name of *runse*. The waggons laden with it run from the mines to the works, where each drops its burden into the *bousse-teams*—that is, into a range of open compartments—according to quality. Here the ore lies ready to hand, the washing floors are adjacent on the same level; and the next operation is to break it up, wash it, and separate metal from stone.

A barrowful of ore is thrown on an iron grating, which is exposed to a running stream of water. The light earthy and gritty particles are thereby washed off, and carried off into the "trunk-box" placed in connection with the grating. Meanwhile men and boys stand by with hammers, and pick the washed lumps. That which is all stone is flung aside, the metallic lumps are broken up and sorted, and as much of the alloy got rid of as possible, so as to make them ready for the next operations—"buddling" and "hitching," which may be described as a kind of sifting with sieves suspended in water. The heavy portions then sink to the bottom, where they lie, like a distinct stratum of "galena," all bright and glistening, and ready for the smelt-mill.

The smelt-mill is where the ore is roasted and melted, and cast into "pigs" of lead. The process of roasting is as follows:—The ore is spread out equally on the hearth or floor of the furnace, and the latter being already red hot, communicates its heat to the mineral, which, though it simply softens and does not melt, throws off its sulphur and takes up oxygen. In another furnace it is melted, and you see the molten stream flowing from the tap-hole into a pot. In a third, the stubborn slag, or the dross and refuse, is treated by a roaring blast until it becomes tractable and yields every particle of lead, while splendid blue and green flames leap and play in the impetuous current. The pigs of lead, of course, contain the silver, which is separated by another process. It remains for us now to speak of

THE USES OF LEAD.

Metallic lead has a bluish-white colour; and when recently cut, or scraped, presents a brilliant lustre, which rapidly fades, however, by being exposed to the air. The softness of lead renders it extremely useful in the shape of wire for horticultural purposes, whilst its well-known malleability enables it to be applied in sheets for covering the roofs of houses; in both of these cases the length of time required to rust or oxidise lead renders these applications of the metal of extreme value. One of the most interesting modes of showing the softness of lead is by placing a common seal of sealing-wax between two pieces of soft lead on an anvil, and striking them suddenly with a tolerably heavy hammer; a correct impression of the seal is obtained on the lead, from which other sealing-wax impressions may be taken; and it is said that this was the mode employed by inquisitive post-office authorities in olden times when they wished to know the contents of a letter without betraying the fracture of the seal. Lead is not only used to cover the houses which shelter the living, but has

also been employed from time immemorial in the construction of the box or coffin to contain the dead. Formerly no person could be buried in a vault under a church except in a leaden coffin. Happily the barbarous custom of putting the dead in leaden cases, that were liable to swell, burst, and throw out their deadly gases into the church above containing the living, has now been abolished, except in rare cases, when embalmed Royalty, or the remains of some of our greatest men, are consigned to their last resting-places in Westminster Abbey, St. Paul's, or the Chapel Royal, Windsor.

Cisterns for containing water are commonly made of sheet-lead, in wooden cases, but they are unsafe for this purpose if they are left open to the air. The water then becomes coated with white rust, which is poisonous, and is consequently unfit for cooking purposes. Although lead is in itself poisonous, it is of important use in the arts. Paint is made from lead. It is also used as glaze for earthenware, and is likewise employed in making some kinds of glass, in dyeing, and calico-printing.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XIV.—THE TIGER.



THE tiger is an animal equal to the lion in size and strength, and superior to it in activity. It lacks, however, the majestic beauty and magnanimous qualities of the king of beasts, and is extremely savage and revengeful. Still, we shall see that even in the creation of so terrible and destructive an animal there are marks of wondrous wisdom, plainly indicative of a Divine superintending Head.

The tiger is something of the shape of the lion, but does not possess the lion's shaggy mane. Its ordinary length, from the nose to the tip of its tail, is about ten feet, though many tigers have been slain of twelve feet and more. It moves with wonderful litheness and facility, winding and crawling through the jungle with the ease of a serpent that can bend and twist itself in any direction. It springs upon its prey with a force that is absolutely irresistible. We have all seen a cat leap upon a mouse. The tiger is simply a gigantic cat, and leaps upon a buffalo and carries it away with just as much ease as the cat carries away the captured mouse. Its skin is covered with beautiful thick glossy hair; and the hair of the tiger is uniformly noticed to grow thicker in the colder latitudes than in the hottest part of the tropics. The skin of the tiger is very beautiful, and is highly prized. The groundwork of it is of a sandy or tawny colour, and, at regular intervals, broad black stripes cover it. These stripes extend to

the very tip of its tail, and form bands or rings. But while the skin is so beautiful, it is not beauty merely that a beneficent Creator intended. There is an exquisite adaptation between it and the jungles where the tiger most dwells. The bushes and shrubs and trees of the jungle constitute a perfect retreat and hiding place. As the tiger slouches or crawls along with silent footfall, scarcely ever disturbing branch or leaf, it takes a wonderfully acute eye to distinguish the movements of his sinuous form from the motion of the trees disturbed by the wind. He does not gallop like the lion, but goes speedily along at will by an acceleration of his walking pace, and the real swiftness of his progress could hardly be suspected from his apparently leisurely procedure.

The tiger excels the lion in the vigour and extent of his springs, for which he is admirably qualified by muscles that are prodigiously powerful. His teeth seem expressly designed for the destruction of large animals, and for the tearing and dividing of the fleshy fibres. Some of the teeth are armed with points which correspond in the opposite jaws, so that when the mouth is shut they lock into one another like the cogs of machinery. The muscles that enclose the jaws are of enormous size and strength. The tongue is armed with sharp points that hook backwards so as to prevent the prey from escaping. Like the lion, the tiger is provided with whiskers endowed with wonderful keenness of sensibility through their being largely supplied with nerves. These whiskers are of great assistance when crawling through the dense jungle.

The tiger hides itself by day and seeks its prey by night, and its eyes are so constructed as to see far better in dusk or even darkness than in the noonday glare. Its most common device for securing its prey is to roar aloud in the jungle, and off rush the scared buffaloes and antelopes to their hiding place in alarm. This is just what he wants, and having frightened them into their hiding places, which he knows well, he goes quietly round and makes his supper. But he is a terrible adversary to men as well as to antelopes. Tigers, like cats, are all thieves and murderers from the beginning. The meek-looking hypocrite purring on the domestic hearth, and presenting in appearance a perfect picture of amiable innocence, has perhaps just laid down to digest a sparrow it has been lying in wait for. Many a demure and sedate "tabby" slyly glances at the canary, anxious for a spring at the cage, and is withheld by nothing but fear of condign punishment. Like the cat watching for sparrows or for mice, the tiger will lie in wait, not only for animals, but when it gets too old for their superior strength or fleetness, will as patiently lie in wait for men.

In some villages in India the ravages of tigers are fearful. In Singapore as many as 500 Chinese coolies have been devoured in a single year by them, for there is a great scarcity of game in the islet. An old shekarry, or native hunter, thus describes the den of a man-slaying tiger he had shot:—"This was evidently the tomb of

the man-eater, for I counted, from skulls and other human remains, about twenty-three victims, of both sexes, as we could see from the hair, clothes, broken armlets, and gold and silver ornaments belonging to native women. We picked up two massive silver bracelets belonging to his last victim, whose remains were identified by the villagers who were with us. We also found two gold teekas, or neck ornaments, which mark the married women (as the gold ring on the left hand with ourselves), and a knife which we were assured has belonged to a postman missing about a month before." The man-slaying tigers, however, are now growing fewer by the conjoined influences of greater caution being exercised by the villagers and the animals being more commonly hunted and slain. The Indian Government used to give a reward of ten rupees for every tiger killed, so thickly were many parts of the country infested by these injurious beasts. This is now no longer necessary, as tiger hunting has become a favourite and popular sport with both military men and civilians.

Tiger hunting is a dangerous and an exciting pursuit, but the danger and the excitement seem only to make it the more attractive. It is often conducted on a scale of great magnificence. A large and powerful cavalcade marches into the jungle, composed of dogs, horses, elephants, with the hunters in large howdahs on their backs, and attendants of various kinds to beat the bushes. In these grand hunting expeditions the elephants render the most important service, for, loaded as they are with armed men, they will rush into the jungle on the tiger when wounded, or when at bay, and transfix him with their tusks, or crush him to death with kneeling on him. Beside this open method of declared war, numerous traps are laid for the tiger, and by the most ingenious devices men protect themselves against his terrible power, and obtain as trophy the highly prized spoil of his beautiful skin.

The tiger, unlike the lion, is not used as a symbol by any Christian or civilised power. As an emblem it is appropriate only to represent a cruel and bloodthirsty government. No government, one would think, could choose so terrible an animal, or accept it, as being representative. Yet, strange to say, a tiger's head, adorned with jewels, was placed in a most conspicuous position on the throne of Tippo Sahib, and fitly indicated the character of the government of that wretched man.

Some will, perhaps, wonder that the creation of a savage beast like the tiger should be mentioned as proof of the goodness and wisdom of God. But it is plain that in its remarkable structure and habits there are numerous instances of profound contrivance and adaptation of means to ends. In its powerful and complicated frame there is great unity of design, and in reference to all its surroundings of climate and of home and food, it is believed to fill a place peculiar to itself in the great scheme of Nature. And if we occasionally meet with difficulty as we glance at link after link in the vast chain of vegetative, animal, and intellectual life, we need not be surprised.

The diversified creations of God, which, in an ascending degree progress from an atom to an archangel, are not to be comprehended by our puny intellect all at once. Where we see most thoroughly and understand most completely, all the works of God appear to be absolutely perfect; and this should make us strongly suspect that where our intelligence is confounded, it is because something material to the case has escaped our notice. Believing as we do, that "the Lord is good to all, and that His tender mercies are over all His works," and finding in the wonderful arrangements of Nature so much that affords solid foundation for our faith to rest upon, we shall not be daunted if here and there we find things that are too high for us; for is not this a confirmation in its measure of the statement that "His understanding is infinite?" We do not expect to fathom all the purposes of an infinite understanding, but a reverent study of the works of God in nature continued will probably relieve us ultimately of the difficulties that now press upon us, just as the man comes to understand perfectly what were painful and perplexing mysteries to him as a boy.

TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CHAPTER IV.—A HARD PILLOW.



LONG before Tom awoke next morning, George was up and told his mother all about the reading and prayer they had had in their room on the previous night. He got the old Bible, and asked his mother if Tom might be allowed to read out of that before they had their breakfast. Mrs. Strong, a little surprised at her boy's earnest manner, consented.

When Tom opened his eyes, he was a little while before he could make out where he was. But this did not take him long. He got out of bed, put on his clothes, read a verse or two of his Testament, prayed a few words, and went down stairs. George set a chair for him, and asked him to read in their Bible, and teach both him and his mother how to pray. The widow was hardly prepared for this; but said nothing. Tom quietly opened the Bible, and read the third chapter of St. John's Gospel. They all three knelt down, and again Tom expressed a few broken sentences, and asked God to make them all good, take care of them, and at last send the angels to take them to the mansions of heaven. It was enough; God sent His Spirit to the heart of Mrs. Strong. When she was a girl her mother used to read to her the Bible—this same old Bible—and pray with her. She had often heard the minister in the village church, and lived a serious life until her marriage. Then, like hundreds of other young

women, she neglected all religion, forgetting that it was even more necessary then than before. She had never prayed with her boy, had never spoken to him about loving Jesus and giving his young heart to Him. She felt how very wrong all this was, and determined to do better. She made up her mind—like we hope all our readers will—never to neglect God's Word and prayer any more. She told George that in future a portion of the Bible should be read every day. George was delighted.

They had breakfast, after which Tom prepared for his journey. Mrs. Strong found him a pair of old clogs which George had worn, and also a pair of stockings. Putting these on, he bid them good morning, hoping that some day he would be better off and able to pay them back for all they had done for him. Mrs. Strong and her boy felt repaid already, and lived to bless the day they had sheltered Tom Foster, the orphan boy. Like the little girl in Naaman's house, he was the means of a great blessing to those who sheltered him. The blessing which Naaman received was the cure of his leprosy as he dipped in the Jordan. But the blessing which Mrs. Strong and her son were led to receive was the cure of the soul's leprosy as they dipped in the fountain "open for sin and for uncleanness in the house of Israel."

For the present we must leave Mrs. Strong and her son, and follow Tom in his journey. We shall meet them again. But before doing so we wish to impress upon our young readers especially the desirability of doing good. Here is an example nobly set by a poor homeless boy. Some boys and girls seem to think that *they cannot do any good*. This is a mistake. Everyone can do something. And, perhaps, the first and foremost of all good things is to live a good life. This can be done by all. I know that every boy cannot be a Samuel, a Timothy, a Luther, or a Wesley. Neither can every girl be a Miss Nightingale or a Queen Victoria; but you can all be followers of Jesus, and show by your obedience how much you love Him. Like Tom you can read His Word and pray to Him every day.

Tom trudged on towards Liverpool. All that day passed without anything remarkable taking place. Night came on and found Tom asleep in the horse-box of a cart-shed next to a roadside inn. He had seen this shed in the earlier part of the evening, and late at night crept quietly into it, carrying with him a stone, which he used as a pillow. Here, laying his head upon the stone, "he forgot his miseries for awhile in sleep; and innocence found on this flinty pillow more ease than down can supply to the guilty." The night was bitterly cold; but Tom was so tired with the day's march that he slept in spite of the frost.

About eight o'clock next morning he was aroused by the loud tones of a man's voice. "Now then, stand still, will you? Back a bit," said someone. Tom raised his head a little to peep over the edge of the manger, and saw to his amazement a waggon and horse, the head of which was within a few feet of his own. The driver was

busy with a bag of corn, part of which he evidently intended to put into the manger where Tom lay. Cold as was the morning, he burst into a perspiration at once. What was to be done? He was afraid of being punished for sleeping there, but knew that he must be discovered in a minute or two. He felt that there was no time to lose. So he determined to get up and tell the man that he was poor, thinking perhaps he might have pity upon him. So, making up his mind and gathering all his courage in less time than it takes to describe it, he suddenly sat up in the manger. One moment more and the corn would have been spread upon him, for, just as he sat up, the driver had lifted the corn sack and was approaching the manger.

"Good gracious!" cried the startled driver, as Tom sprang up almost as if he had come from another world. He dropped the sack, and was so frightened that for a minute or two he was speechless.

CHAPTER V.—LOST IN THE SNOW.

TOM got out of the manger as well as he could. This, however, he found to be no easy matter. His limbs were stiff with the previous day's walking. The night's exposure had made all his bones ache as if he had been thrashed. Fearing that he *now* would be thrashed, he rolled out of the horse-box, and began to tell his tale. The frightened waggoner had by this time partly recovered himself, though the perspiration still stood on his forehead. It would be hard to say who was most afraid—the man or the boy. Tom made no attempt to escape, but stood there trembling from head to foot.

"You little vagabond!" said the man, as he laid hold of Tom by the collar and led him from the shed to the public-house; "what brings you here? Look here!" said he to another man, "what I have found in the manger; ain't this a fine thing to begin the day with?"

But the man was not so cruel as he seemed to be. He had children of his own, and thought of them as he led Tom into the house, and placed him near the fire. The landlord, landlady, and a few others stood looking at Tom while the driver told how he had found him.

"How long have you been there?" asked the landlady.

"All night," said Tom.

"And what made you sleep there instead of going home to sleep?" inquired she.

"I have no home," said Tom, and told them his simple tale. Before he had finished, the driver who had found him was heard to cough once or twice rather strangely, and seen to draw the sleeve of his smock-frock across his eyes. The landlady said to her husband—

"I could never have slept in my bed last night if I had known that that poor thing had been in that cold cart-shed." As she said this she went off to the kitchen and brought a mug of hot coffee, which she gave to Tom, with as much toast as he could eat. Whilst he had his breakfast, the rest had a good laugh at the driver as he

told them how he had seen Tom come, as he thought, from the grave.

After finishing his breakfast and warming himself well, Tom took his departure, thanking them for their kindness. This day he found walking very painful. One of the clogs which Mrs. Strong had given him broke, and hurt his foot so very much that he was obliged to take them off and once more walk on his bare feet.

The day wore wearily along. He passed but few people and had no company. Night came at last, and a bitter night it was. Snow had fallen during the day, which made his travelling more difficult. A cold wind was blowing, and seemed almost to pierce through him. As the evening advanced the snow continued to fall.

Tom had misused his way. He was now in the open country. In vain he sought for a shelter. Still he kept on, hoping to find some house in which, perhaps, he might beg a night's lodging. The rags, which barely covered him, were but poor guards against the nipping wind which blew. His feet were nipped and numb with the snow. But he was fast growing insensible to all this privation and suffering. His head felt strange. He became very dizzy and all seemed to be going round. Several times he almost fell. He could go no farther. Standing there for a minute, he resolved to sit down and give himself up for lost. All hope was gone. Just then, looking a little to his left, he saw, or thought he saw, a faint gleam of light in the distance. New hope came: but, alas, his strength was almost exhausted. Oh, how he longed to reach it! He made a last effort. What little strength was left he now put forth. He moved in the direction in which he thought the light was. On and on he went, fearing that every step would be his last. There it was. He could now see it. As he saw it, he felt sure that it was not far away. It is impossible to describe the agony through which the boy was now passing. Weak with travel, exposure, and want of food, he was ready to perish. The excitement kept him up for a time, but the crisis came. The light seemed to be within a very short distance of him, but it was beyond his reach. He felt himself falling. Raising one loud cry for help, he fell cold and senseless upon the snow.

BAND OF HOPE PAPER. STOCK-TAKING.

EXTRACT FROM A LECTURE GIVEN AT A YOUNG MEN'S
IMPROVEMENT SOCIETY.

IF my voice could be heard from east to west and north to south of this our highly-favoured land I would raise it against the awful waste of money in drink, liquors, tobacco, snuff, &c. If ever there was a time when all well-wishers of their country should set their faces against this great and crying evil it is now. Let us just take stock and see the tremendous misery

it is creating. Though there never was a time when so many agencies were at work to stem this evil, yet the iniquitous traffic in intoxicants, sanctioned and upheld by law, patronised by men of learning, position, and great national influence, still continues to fill our prisons, asylums, penitentiaries, workhouses, and, to a large extent, our hospitals and infirmaries. It continues also to render children fatherless, making widows by wholesale, and creates miserable and wretched homes. Its victims are to be counted by thousands, or rather by tens of thousands and hundreds of thousands. We wish that the working men of this country who have fallen in this snare would reflect—take stock of their position! We cannot but think they would alter their ruinous course, and prefer to see their wives comfortable and happy, rather than miserable and wretched. "The drunkard and the glutton shall come to poverty, and drowsiness shall clothe a man with rags." Though Solomon uttered these words 2600 years ago, they are still true. We still find, as a rule, that the drunkard, sooner or later, comes into the street of poverty. However dark the picture drawn by the pen may be, it fails to do full justice to the awful sadness of the reality. The half cannot be told. It robs our schools and churches of their best members, and brings many to an untimely end, to the loss of body and soul. Oh that all would be induced to give up drink and all other sensual and costly indulgences! We have been looking into the expense of the habit of drinking and smoking, saying nothing of other habits which are worth nothing and cost much.

A man who drinks what is called moderately will expend fourpence per day, which is about six pounds a year. To this add the average amount of one shilling per week for tobacco, and you have eight pounds twelve shillings per year. Then add loss of wages through drinking, and you may fairly say that every man who drinks and smokes but moderately wastes ten pounds per year. Yet many of these persons appear to be satisfied thus to live and allow their wives and children to be poorly clad, with scarcely a farthing in their pocket from Monday to Saturday. How natural it seems for some men, the moment they leave the factory on Saturday at noon, to go straight with their wages to the alehouse! Their feet are certain to be in the direction of that place which they have the most to blame for their culpable wretched condition. Let such who are under this slavish yoke beware lest the fetters which bind them become too fast to be broken away. They should take stock of their condition ere they find themselves involved in irretrievable bankruptcy. A good name lost, friends gone, money all spent, self-respect destroyed, and the confidence of others forfeited; these are the results to which a drunkard's life invariably leads.

Young men, especially to you we address the admonitory words of Solomon: "Who has wee? Who has sorrow? Who has wounds without cause? Who has redness of eyes? They that tarry long at the wine; they that go to seek mixed wine. Look not thou upon the

wine when it is red, when it giveth its colour in the cup, for at the last it biteth like a serpent, and stingeth like an adder."

Batley.

J. J. F.

OUR SUNDAY-SCHOOL ALBUM.

BY ENOCH GRATTON.

(Continued from page 74.)

XI.—MISS NEVERFAIL.



THE portrait you next see is the likeness of a most estimable friend of mine, and if I told you *all* I think of her virtues you would probably think I was exaggerating. She is one of the excellent of the earth. She is always abounding in the works of the Lord, in season and out of season; weekday and Sabbath she feels that she *must* be about her Father's business. She sows beside all waters, and was rarely, if ever, yet known to be weary in well-doing, and doubtless she will reap in due season. She may seem to fail, but she will not say "Fail," and though she toils all night and takes nothing, the morning shall come and the Master shall come, and crown her efforts with success. Even apparent failure intensifies her ardour and strengthens her resolution. It is not because there are no difficulties in her post, no weaknesses in her heart, that she succeeds. She battles bravely with the difficulties, and takes her weaknesses to Him who is mighty to save, and who "giveth power unto the faint." Miss Neverfail does not owe her success to her superior rank, culture, or accomplishments. She is, as you may see by her face and garb, what might be called a poor, plain, hard-working girl. She has much grace and some gifts—among others, the gift of "continuance." She holds on her way, and daily waxes stronger and stronger. She prepares her lessons carefully, and, like some other friends whose cartes appear in this Album, she goes to school regularly and in time. The scholars would rub their eyes and be filled with wonder if *she* began to come late. One by one her scholars are being led to the Saviour. They are prayed for and spoken to personally and separately, and are joining the Church of Christ.

Sometimes the temptation to give up has been powerfully presented. Her health has been feeble, her body weary with the toils of the week. The claims of home have had to be responded to; the pleasures and excitements of youthful society have been spread around her. The scholars have been listless and ungrateful. There has been, on the part of many, a want of sympathy with the spiritual

work—the deepest and highest work of the Sunday-school teacher. Some who should have cheered and helped have been cold, obstructive, and envious. But she would not give up. She might weep, and pray, and wrestle with God for more grace and power, for

“Faith that never falters,
Unmoved by fear or praise,
With love that never alters
And hope in darkest days.”

But she will not desert her post. She is resolved to be faithful unto death. Wordsworth describes in very beautiful language the efforts of a miner who

“Alone waged unremittingly the stubborn work
Unseconded, uncounseled. A long and slanting
Track upon the rugged mountain’s stony side,
Worn by his daily visits to and from
The darksome lustre of his constant hope,
Is named the Path of Perseverance.”

Miss Neverfail is well acquainted with the path of perseverance. She makes effort after effort, exerts energy after energy, breathes prayer after prayer, just as the waves of the sea when one billow breaks another rises to take its place, each billow coming nearer and nearer to the shore.

XII.—MR. WAVERING.

That is the name, and this the portrait, of an acquaintance of mine, and possibly he may be known to some of my readers. He belongs to a large family. He is brother to Mr. Fitful, cousin to Mr. Windy Wordy. He is a descendant of a man named Reuben, who lived a long time ago, and of whom it was said, “Unstable as water, thou shalt not excel.” A very painful disease has prevailed in this family for many centuries, in fact it seems to be hereditary and incurable. It is called “Fits and starts.” It seizes them suddenly, excites them, impels them along for a short time in a kind of frenzy of zeal. Like one of their ancestors they “drive furiously,” and threaten to carry everything before them, and to crush everything beneath them. But, like an ill-trained steed, they soon run themselves out of breath. They run fast but not far, and stop short of the end. They have a habit of doing what an old man once told me he had done. He said, “I laboured so long, then I took off side.” So the Wavering family often “take off side.”

The Mr. Wavering whose “carte” I now show you is not an old man, but, to my knowledge, has often taken off side. You can never rely upon him. He may be at his post or may be miles away. Look at his face. It lacks expression, firmness, and force. His eyes and lips tell of fickleness. Take hold of his hand, and you are impressed with his want of grip and energy. Listen to his voice, there is nothing

ringing, and clear, and decisive in its tones. Now and then he promises to surpass all ordinary Christians in the race of life. His zeal is irrepressible; his prayers are fluent, loud, and long; his reproaches to lukewarm Christians are bitter and stinging; but in a short time he is as dull and dead as the worst in that class. He is like a clock, which at times takes a fit of striking, and not content with striking twelve, strikes a score or more, and shortly will not strike at all.

His virtues are like the cheap prints seen in drapers' windows, and sometimes made into summer dresses; the colours are very bright and flashy, but they are not "fast" colours. They won't stand rain. The first shower washes them out, and causes them to run into each other.

If a moral thermometer could be applied to his soul on one occasion you would see his feelings at "96°"—that is, blood heat, but at no distant period you might see them at "32°"—that is, freezing point. Catch him in the first mood and you would think it impossible for his class ever to be neglected. But it has been neglected, and when he has been visited about his absence his excuses have been most lame and unmanly. One Sunday he was not very well. Another Sunday some friends called to see him; then he went to see some friends. Another Sunday was very wet. Now he slept too long, then he went to hear a popular preacher. Besides all this, the scholars were not attentive, his labours not appreciated by the other teachers and by the officers. Mr. Wavering has been a great trouble to the superintendent. He is at a loss what to do with him. He does not want to strike Mr. Wavering off the roll, but he wishes he would either be steadfast or give it up altogether, for he takes more looking after than he is worth. It is a great pity that a man with the fair abilities and the grand opportunities of Mr. Wavering should throw himself away. His life is almost a failure. His friends scarcely trust him when he means well, for he has so often disappointed them.

His labours have produced little good. His prayers have not been answered because he has not asked "in faith, nothing wavering. For he that wavereth is like a wave of the sea, driven with the wind, driven with the wind and tossed. For let not that man think that he shall receive anything of the Lord. A double-minded man is unstable in all his ways."

Such a man is the friend whose carte has for some time had a place in our "Sunday-School Album," whose example I entreat you to shun. It is amazing how much may be done by a feeble and lowly worker who labours with steadiness and pertinacity, who through cloud and sunshine, in loneliness and in company, amid defeat and victory, keeps "pegging away."

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

APRIL

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
1 The Resurrection from the	1 Cor. xv. 41-58.	Ver. 2.
8 Peter's Confession [Dead	Matt. xvi. 18-28.	Rom. x. 9.
15 The Young Ruler	Matt. xix. 18-30.	Luke xviii. 22.
22 Christ's Entry into Jerusalm.	Matt. xxi. 1-13.	Zech. ix. 9.
29 The Barren Fig-Tree.....	Matt. xxi. 14-27.	John xv. 8.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
1 The Oil increased	2 Kings iv. 1-16.	Ps lxxii. 12.
8 The Shunammite's Son ...	2 Kings iv. 18-37.	Matt. xv. 28.
15 Naaman the Leper.....	2 Kings v. 1-14.	Ps li. 7.
22 Gehazi the Leper	2 Kings v. 15-27.	Prov. xiv. 27.
29 Elisha at Dothan	2 Kings vi. 8-23.	Ver. 16.

MAY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
6 Christ's Last Passover	Matt. xxvi. 17-30	1 Cor. xi. 26.
13 Jesus in Gethsemane.....	Matt. xxvi. 31-46	Ver. 42.
20 The Betrayal and Arrest	Matt. xxvi. 47-68	Ps. xli. 9.
27 Jesus Accused and Denied	Matt. xxvi. 59-75	Heb. xii. 3.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
6 The Famine in Samaria...	2 Kings vii. 3-20	Luke xviii. 27.
13 Jehu the King	2 Kings x. 18-36	Rom. x. 2.
20 Jonah at Nineveh	Jonah iii.	Matt. xii. 41.
27 The Death of Elisha.....	2 Kings xiii. 19-25	Ps. cxli. 6.

PUZZLES FOR CHILDREN.

By UNCLE GEORGE.

SCRIPTURAL ENIGMA.

1. A woman who accompanied her mother-in-law to Bethlehem.
2. A stone by which David hid himself.

3. A kinsman of St. Paul.
4. A stone in the high priest's breastplate.
5. A seer who recorded the events in the life of Solomon.
6. That which Paul left with Carpus.
7. An elder upon whom the spirit of prophecy fell.
8. A country from which a great multitude followed Jesus to the sea.
9. That in which a wicked servant placed his pound.
10. That upon which Ezekiel was told to pourtray the city of Jerusalem.
11. A grandson of Anah.
12. The son of Baasha.
13. One of the twelve Apostles.
14. A tree mentioned in the Bible.
15. A great city between Nineveh and Calah.
16. That by which the sin of Judah was written.
17. A prophetess who gave thanks at the coming of the Lord.
18. A city where Peter healed the sick of the palsy.
19. That which Laban changed ten times.
20. The captain of Saul's army.
21. That which Solomon says "pacifieth great offences."

The initials of the answers form an exhortation of Paul.

ANSWER TO ENIGMA IN FEBRUARY.

1. A-donijah, 2 Sam. iii., 4.—2. D-orcas, Acts ix., 36.—3. O-mri, 1 Kings xvi., 23.—4. N-athan, 2 Sam. xii., 13.—5. I-chabod, 1 Sam. iv., 21.—6. B-arak, Judges iv., 6.—7. E-den, Gen. ii., 8.—8. Z-edekiah, Jer. lli., 11.—9. E-lkanah, 1 Sam. i., 1.—10. K-enaz, Josh. xv., 17.

ADONI-BEZEK, Judges i., 5.

ERRATUM.—In the answer to January Enigma Daniel viii. was by mistake printed Daniel xiii.

Many of our young friends, in their Answers to the February Enigma, have stumbled at the arrangement of the words in the fourth line.

"A prophet who David reproved for his guilt"—that means, they say, a prophet who was reproved by David, and they cannot find any record of a prophet being thus reproved; but they do read of David being reproved by the prophet Nathan, and so, at a venture, they put Nathan down as the answer. The answer is right, but they are wrong in supposing that the words, grammatically construed, inquire who was the prophet that David reproved. If they will read carefully what their grammar says about the cases of relative pronouns, they will discover their mistake. When we speak of the actor we say *who*, when of the person acted upon we say *whom*. Therefore

to make the line mean that David chided Nathan we should have to read, "A prophet *whom* David reproved."

Several of our correspondents amend the line for us. They say it should be, "A prophet who reproved David." As far as meaning goes that form would be correct, but do not our little folks see why the words are arranged as they are? The Enigma is given in a poetical form, and poetry requires not only rhyme but rhythm. (For the full meaning of these words we must refer to a dictionary.) Not only must the words which end the lines have consonance of sound, which is called rhyme, but the different parts of the lines must have a measured and harmonious motion, and this we designate rhythm. Now, the transposition of the words recommended would certainly destroy the rhythm if it did not the rhyme. Let us try it—

"Next, one who was king, and a great city built;
Then, a prophet who reproved David for his guilt."

Read the couplet aloud, and your ear tells you that the line is faulty; but substitute the line as constructed by the writer of the Enigma, and all flows along smoothly and harmoniously.

"Then, a prophet who David reproved for his guilt."

UNCLE GEORGE.

UNETT STREET SCHOOLS, BIRMINGHAM—COMPETITIVE EXAMINATION.—

At the conclusion of the report of the first competitive examination held at Unett Street are these words: "The results so far are satisfactory, but we are looking forward to still greater in the future." These "results" have not been attained yet, as this report of the third examination will show. The teachers and the committee appointed to manage the details have been as diligent as formerly, but from some unexplained cause, the scholars—for whose benefit these efforts have been made—have not appreciated them to the extent the committee and teachers thought they would; still they indulge the hope that these "tests" have done good, which will perhaps be seen in after days. The examination for this year (1876) was based upon the afternoon lessons of the International Series, second quarter, as published by the Sunday School Union. The teachers did their part by diligently preparing and working up those instructive lessons, and on the afternoon of Sunday, August 27, the scholars assembled in the schoolroom for the "tests." The questions—prepared by the examiners, the Revs. A. M'Curdy and C. Leach, and Mr. Christie—were distributed to the twenty-four of our scholars who presented themselves. Two hours were allowed for writing the answers, and the examiners, after reading them carefully over, awarded two first, three second, three third, and three fourth classes prizes to this section, which consisted of the first four classes in each school. The second section, from fifth to eighth classes in each school, were examined orally, and fifteen prizes awarded; and twelve prizes to the little ones for punctual attendance and general good conduct; total thirty-eight. The prizes, which consisted of books, were selected by the examiners, and were distributed publicly to the successful competitors by our esteemed superintendent, Rev. A. M'Curdy, on the afternoon of Sunday.—A. W. NORTHWOOD, Secretary. Oct. 22nd, 1876.

VINCENT STREET SUNDAY SCHOOL, BURSALL HEATH, BIRMINGHAM.—

Dear Sir, — A juvenile missionary meeting and entertainment was held in our school on Monday, February 14th, and a rather lengthy programme was gone through by our collectors and young friends, with that precision and success which juveniles only seem capable of, whatever the occasion may be, if their hearts are only in it. I need not take up your limited space with a detailed account of our programme; suffice it to say excellent recitations, speeches, solos, instrumental and vocal, and hymns were rendered before a full and appreciative audience—the Rev. Charles Leach presiding, and those of your readers who have had the pleasure of listening to that gentleman will need no assurance from me that altogether a pleasant and instructive evening was passed. We are only a small body in this neighbourhood, and by no means a wealthy one, but our juveniles do their part nobly, and I'm sure you will admit when I tell you that our total is made up almost entirely of pence and halfpence collected by them, and without the aid of donations from well-to-do friends (which we should like to get hold of, nevertheless, if possible) to assist it. The sum raised by our juvenile missionary society some few years back reached only to a little over £3, but this last two or three years it has been increasing; and has exceeded £12. We have collected at present for this year £7 7s. 3d., and the collection at our meeting was £2 13s. 6d., bringing it up to a sum of £10 1s. 3d.; but as our missionary year does not close until the end of May, we hope to be quite up to last year's amount, if not exceeding it, by that time. As I presume that the one great object in your publishing the reports of the work of our juveniles is to give encouragement and useful information throughout our whole Body, it will not be out of place here if I give my opinion—arrived at by practical working—as to the best mode of making these agencies successful, and it may possibly prove of use to other secretaries. 1st. The secretary *must* be in attendance *every* Sunday, or find a supply. 2nd. If a collector has failed to bring in all his or her subscriptions, ask the reason, and if it is not the child's neglect, visit the subscriber yourself, even though it may be only one halfpenny per week. 3rd. Keep the scholars well interested in the work by holding meetings, in which the youngest might take part (we had them from five years of age, and even a vocal solo from one of *tender months*, which, by the way, was not in the programme), or a tea now and then, to which the collectors might invite their young friends and spend a social evening together. This suggestion is one which, of course, would not answer equally well everywhere, but we can all enter into the spirit of it, and use those means which are most suitable to the locality, &c. Just one other idea. I have often wished there was a yearly missionary report of our young folks' doings, obtainable at such a price that would admit of each collector, throughout the whole Connexion buying one. Whether this could be done by an extra number of your Magazine once a year, or by publishing that part separately of the General Missionary Report which contains what I speak of, your experience and judgment, I'm sure, will lead you to a correct conclusion. Wishing all our juveniles a God-speed in their noble work, and not less success than we have achieved here, I remain, dear sir, yours truly—L. Houghton, Secretary.

Memoirs.

—o—

WILLIAM GREENWOOD

WAS born at Godle, on the 27th of December, 1860, where he lived with his parents until the year 1866. In this year the family removed to Barnsley. He here first attended the Wesleyan Sunday school, and remained connected with it for nearly three years. Having an elder brother who attended our Ebenezer school, it was thought better for both to be together. After leaving the Wesleyan school he joined ours. He would join ours first about December, 1873.

His attendance, owing to lack of robustness, was not so regular as could have been desired. With respect to his punctuality, he has left an example worth imitating. Such an advocate for it was he, that when ill he was greatly concerned lest his sisters should ever be too late for the school.

At school he was remarkably quiet, neither speaking to teacher nor fellow-scholars. Still he was evidently attentive to the lesson of the day, and seemed earnestly to desire good. We need scarcely add that he gave no trouble to anybody. It was not until confined to his home that he seems to have fully realised his position before God, notwithstanding the good counsel he received from his widowed Christian mother, as well as the good impressions made on his mind in the school. Consumption was the fatal disease under which he languished. Our young friend was first confined to his home in September, 1875. He was visited by teachers and scholars as soon as they knew illness kept him from the school, and their prayers he responded to most heartily. In a few months he more openly confessed his trust in Christ. He bore all his sufferings patiently, looking forward to the rest of the skies. During the last few weeks of his life it was good to be with him, for he spoke so sweetly of Christ and of heaven. He assured his mother on one occasion when she stood by his bedside weeping because of his sufferings, that Jesus had taken all his pain away, in answer to the prayers offered. Later on he asked to see his brothers and sisters' teachers, and all who had spoken kind words to him, to bid them farewell. He thus passed away, safe in the arms of Jesus, May 18th, 1876, aged sixteen years. A number of teachers and the class to which he belonged were present at his funeral, also the senior class of females, who sang when leaving the house the beautiful verses:—

“ How happy every child of grace, Who knows his sins forgiven; This earth, he cries, is not my place, I seek my place in heaven!	“ A country far from mortal sight, Yet, oh, by faith I see The land of rest, the saints' delight, The heaven prepared for me.”
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When passing the school we sang the 192th hymn in our school hymn-book:—

“ Death has been here and borne away
 A scholar from our side;
 Just in the morning of his day,
 As young as we he died.”

By the graveside we sang the well-known hymn:—

“ Safe in the arms of Jesus,
 Safe on His gentle breast,
 There by His love o'er-shaded,
 Sweetly my soul shall rest.”

Oh ! that the last end of the writer and every reader may be like his !

JOSEPH WAINWRIGHT.

Poetry.

A LITTLE CHILD'S FANCIES.

I THINK that the world was finished at night,
Or the stars would not have been made ;
For they wouldn't have thought of having the light,
If they hadn't first seen the shade.

And then, again, I alter my mind,
And think perhaps it was day,
And the starry night was only designed
For a little child tired of play.

And I think that an angel, when nobody knew,
With a window pushed up very high,
Let some of the seeds of the flowers fall through,
From the gardens they have in the sky.

For they couldn't think *here* of lilies so white,
And such beautiful roses, I know ;
But I wonder, when falling from such a height,
The dear little seeds should grow !

And then, when the face of the angel was turned,
I think that the birds flew by,
And are singing to us the songs they learned
On the opposite side of the sky.

And a rainbow must be the shining below
Of a place in heaven's floor that is thin,
Right close to the door where the children go,
Where the dear Lord lets them in.

And I think that the clouds that float in the skies
Are the curtains that *they* drop down,
For fear when we look we should dazzle our eyes,
As they each of them put on their crown.

I do not know *why* the water was sent,
Unless, perhaps, it might be
God wanted us all to know what it meant
When we read of the "Jasper Sea."

Oh ! the world where we live is a lovely place,
But it oftentimes makes me sigh,
For I'm always trying *causes* to trace,
And keep thinking "Wherefore ?" and "Why ?"

Ah ! dear little child, the longing you feel
Is the stir of immortal wings ;
But infinite Love one day will reveal
The most hidden and puzzling things.

You have only your duty to try and do,
To be happy, and rest content ;
For by being good and by being true
You will find out *all that is meant !*



THE CRIPPLE BOY. Digitized by Google

THE CRIPPLE BOY.

WE naturally desire for children and young persons strong and healthy bodies. In youth we have strong impulses to activity; we like to use our limbs, and run, and leap, and climb. When, therefore, we see a boy like the one represented in our picture, who is obliged to use crutches to move about, we have a feeling of pity for him, and we think how unfortunate he is; that is, we think he is deprived of a great many sources of happiness which boys who have the perfect use of their limbs possess. Well, it is so. A lame or a weak boy cannot play at a many games which give to those who can engage in them great pleasure. How delicious it is, for instance, to have a good game at cricket, or at hare-and-hounds, or at football! But our poor lame boy is forbidden all these and other games of a similar kind. Must he then be discontented and fretful? Nay, for if some, or even many, sources of pleasures are closed to him, all are not. He may have to enjoy himself quietly, but quiet enjoyment is not the least delightful kind of enjoyment. How nice it is to get an interesting and instructive book, and have a good read of it all by yourself! Or what pleasure is yielded to us by pursuing some useful study! I have known many afflicted children quite as cheerful and happy as strong and vigorous children. From my window I often look upon a boy in the street who is far more heavily afflicted than the boy in the engraving. He has one of his legs encased in an iron machine, and cannot straighten it in the least. But that little boy is not always crying or looking sad. Indeed, I have never once seen him look sad, but he always appears as merry as a lark, and his face is as cheerful as sunshine. And that is the disposition that all children should cultivate, for their mercies always outnumber their trials, and as sure as some sources of pleasure are closed to them there will be still left open a sufficient number to make life a gift to be thankful for.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 19.

From Dr. BARLOW to BEN BARLOW.

The Laurels, Woodbourne,
April 30th, 187—.

MY DEAR BEN,—

This is one of the afternoons I reserve for those patients who visit my surgery, and as the warm weather of the last week has robbed me of a great many of them, I find I shall have time to give you the information I promised about Dr. Tasker.

As I mentioned before, Dr. Tasker was one of the first oars at his University, though I do not know that he ever rowed in the great boat-race. When I first went to his school he was a strong, well-knit young man, a great hand with bat or oar, and an expert swimmer.

A few years after I left him his fondness for aquatic sports drew him to a regatta at Evesham or Stourport—I forget which now. On such an occasion of course the town kept holiday, all except the refreshment purveyors, and everybody who could turned out in their brightest and best to witness the annual boat-races and other sports. Besides which, the newly-opened railway poured in hundreds of holiday folks from Birmingham and other surrounding towns. To accommodate as many sight-seers as possible the authorities had erected a large wood platform by the side of the river. In order to get a good view of the contests the Doctor took his place in a good position on this temporary grand stand. Before the time fixed for commencing the sports the bridge, the grand stand, and the riversides for a considerable distance were packed with eager sightseers.

The contests began, and several races were rowed and won. At length the principal event of the day—a sculling match between two champions—came on. But just as the excitement was at its highest, there was a slight scream from the bridge, and a little girl about nine years of age slipped off the parapet, where she had been held by her father, and falling into the river, sank almost at once. The attention of the spectators had been so intensely fixed on the race in progress that the fall of the child seemed only to make them more spellbound, for she rose to the surface, and was sinking again, before anyone seemed to have presence of mind enough to do anything for her recovery.

Just then a dark shadow flitted over the edge of the grand stand, and at the same instant a loud shout of warning was heard under the bridge. The dark shadow was Dr. Tasker leaping to rescue the child. The shout was from a man who was just then rapidly urging

a small boat to the rescue. It was too late for either to stop or turn aside. The spectators held their breath in apprehension of what seemed fated to prove a triple tragedy. Happily the Doctor's head and body missed the boat, but as he plunged underneath the water one of his legs fell heavily across the gunwale, upsetting the boat, and throwing its occupant into the water. Before the boatman could recover himself, Dr. Tasker had caught the drowning girl, and was paddling to the side as well as he could with one arm and one leg.

Of course his leg was broken, but he made light of it until the little girl had been attended to by the surgeons present. He then allowed himself to be lifted into a cab and driven to the town infirmary, where he lay for some days in doubt whether or no he should lose his leg. The little girl speedily recovered, and I have heard the Doctor say he never felt so happy in his life as he did on the first day that dear little girl was able to pay him a visit in the infirmary, and thank him, in her own simple way, for saving her life. At last the Doctor was discharged quite well, but he was never the same active man again, and the injured leg was ever afterwards a little shorter than the other.

Before you again speak slightly of the Doctor's limping, recollect how he got it. With love from us all, your affectionate father,

OLIVER BARLOW.

Letter No. 20.

From CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,

May 18th, 187—.

MY DEAR BEN,—

As we are having our Easter holidays, and have no lessons to prepare, I can find time to write you a good long letter.

I am glad you played those fellows such capital tricks, even though young Instone was too sharp to get caught much. But I say, Ben, you weren't very smart to let them find out who put the snow in the boots. I wonder you did not have to fight them all round.

I wish I could have been with you to "knee you up" in that fight with that bullying fellow Caswell—you know I have done it before. I'm glad to see you keep the Woodbourne credit up, and do not intend to let them walk over you.

I am surprised your father did not approve of your fighting, for it was only last week that I was fighting a fellow in a meadow by the side of the Tinbury road, when he rode up, asked me how it began, and then told me to pitch in and give him a good thrashing.

It occurred in this way. Old Peter, who runs errands for all Woodbourne, had been sent to Tinbury for something, and was coming back at his regular limping speed, when he met a butcher's

apprentice going home. Of course everybody knows Old Peter has got a screw loose in his head somewhere, so this young fellow began asking him questions and laughing at him. The harmless old fellow answered him civilly enough in his foolish way, and the chap began to take further liberties—asked him what he had been for, and tried to take a parcel out of his greatcoat pocket.

Now, however foolish Old Peter may be, he has sense enough to know that he must take care of what is given him to carry, and that he must not tell tales, or else he would soon lose his occupation. So when the butcher lad began pulling at his pocket, Old Peter lost his temper, and at last gave him a tap with his stick. On this the Tinbury fellow struck out at him, and Old Peter would have got the worst of it but for George Wasdell and I coming up at the time.

We saw at once what was up, and so I told the young butcher he ought to be ashamed of teasing a poor fellow who was not well able to take care of himself. This made him saucy, and he said he should tease anybody he liked without asking my leave. "Not while I was by," I told him. "Yes, he would—what did I think he cared for me?—did I want to fight?" I said I was not anxious to fight, but to oblige him I didn't mind. So we stripped off our jackets and were walking round each other for the first blow, when your father came up. He watched it all through—it didn't take long to give the butcher enough—and then rode off smiling.

We have had pretty well of fun this Easter. On the Monday we had the hounds out again, and this time we had a capital run without getting into any scrapes. The master joined us, and was one of the hares. I expect that accounts for our not getting into mischief. But he gave us plenty of work, I can tell you.

I am working hard now for the midsummer examination. I hope I shall make a pretty good figure in it, for I suppose that will be the finish-up of my schooling.

Father and mother send their kind regards to you, and I remain,
your affectionate friend,

CHARLIE THORNTON.

Letter No. 21.

FROM BEN BARLOW TO DR. BARLOW.

Waterside House, Worcester,
23rd May, 187—.

MY DEAR FATHER,—

I am so much obliged to you for the story about Dr. Tasker. I think you have cured me of thinking lightly of lame people for the future. I shall always think that perhaps they got crippled in doing some noble deed.

We were having a game of football in the playground yesterday, and the Doctor was out watching us. I was just resting a bit for "wind" near where he was standing, and he said, "Ah, Barlow,

I've seen the time I could have gone into the thick of the scrimmage with any of you." I said you had told me about his being at one time strong and active, and also that he had been lamed in saving the life of a little girl. He looked pleased, and said, "Should you like to see the little girl I rescued?" I of course said "Yes," so he beckoned me to follow him to the house. He led me into the back parlour, and there sure enough was a bright little girl playing with her doll, looked at her for almost a minute before it occurred to me that a little girl when the Doctor was a young man must be a woman now, and I then saw there was a lady in the room to whom the Doctor was introducing me. "Annie, my dear," he said, "this young gentleman is wishful to see the little girl I got out of the water so many years ago." The lady—Mrs. Tasker he called her, so she must be his son's wife—was very agreeable and chatted some time. When I got up to go, she told me always to follow the Doctor's advice, for he was a wise and good man, and recommended me always to use my skill and strength in doing good, and never waste it in fighting or wrong-doing. I wonder if she had heard of my fight with Jack Caswell?

Please give the enclosed note to mother. From your affectionate son?

BEN.

Letter No. 22.

FROM BEN BARLOW TO MRS. BARLOW.

Waterside House, Worcester,
May 23rd, 187—.

MY OWN DEAR MOTHER,—

I was just writing to father, when Ted Instone burst into the room with my linen basket just arrived from the railway station, and insisted on my opening it at once to see if the usual cake were inside. I did so, and, of course, found you had not forgotten me. That being settled, Ted would have me cut it, to see if there were raisins in it as well as currants. As there were, he desired me to write to you at once, and present the compliments of Edward Instone, Esq., of Regent's Park, London, and Waterside House, Worcester, together with his grateful and altogether inexpressible thanks for the confectionery he so regularly receives. He humbly ventures to express a hope that in future, as on the two last occasions, both raisins and currants will be used in the manufacture.

This reminded me that it had been a long time since I did write to you, so I decided to cut father's letter short, and spend the rest of the time in writing to you. I can't tell you what a treat your cake is. I thank you very much, and so does Ted too, but he puts it in a queer way. He is not a bad sort of fellow, though he makes fun of most things. Not all though. I was quite surprised at him at the Cathedral on Easter Sunday.

We got permission to attend Morning Service. The music was

grand, and all seemed joyous and jubilant, but in such a large place you cannot hear all that is said, and I thought I liked our own quieter service better. But Ted Instone was like one enchanted: His face seemed to glow with pleasure as the choir were singing their grand choruses. All day afterwards he seemed to be hearing them over again, and we could get him to talk of nothing else but organ peals and hallelujahs. He says it reminds him of St. Paul's Cathedral and Westminster Abbey. He would like to attend the Cathedral every Sunday if the Doctor would let us, but, for my own part, I would rather have some good old tunes that I can join in. I suppose that shows my bad taste.

How do the hawthorn bushes look round you? They have been in full bloom here for a week past, and in some of the gardens are hawthorns with pink-flowers, some being double and of two shades of colour.

I hope my livestock are going on all right. Give my love to dear Clara and Helen, and to Bob, and accept a big alicia a whole cake indeed, for yourself, from your affectionate son,

BEN.

P.S.—I am working pretty hard at my lessons.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

V.—NATURAL PRODUCTS—TIN.



TIN is a metal ever regarded with special interest by us; no that it is particularly valuable, that it is connected with any important development of art, or that it contributes largely to the national resources; but because it first brought our island within the boundaries of the civilised world. It was the ores of tin that attracted the Phœnicians, an ancient people of Asia, to Britain, of which they related the most fearful stories, in order most probably to keep other persons from visiting the barbarous island. The commerce which was thus originated seems to have attained no inconsiderable proportions. It was maintained by the Romans after they had established their supremacy over England, for we find that they obtained tin from Britain in order to form their bronze helmets, weapons, shields, &c.; and in certain parts of Cornwall there still exist the mouldering remains and *débris* of old furnaces, and slag or dross. The old furnaces are curiously termed "Jews' works," and the heaps of slag, or melted earthy matter derived from the smelting of the tin ore, "Jews' attal." There is one remarkable heap, called "Attal Saracen," as if tin had been melted at one time for people who traded with the Saracens, or that the metal had been prepared for these who warred with those brave descendants of Ishmael.

Spain, in the Roman period, also furnished to Europe and Africa considerable quantities of this metal; but its mines were abandoned and filled in when, after the invasions of the barbarians, it became the battle-field alternately disputed and occupied by the conquering hordes of the North and East. Since then the Spanish tin mines have never recovered their former importance. A movement has been set on foot of late years for the scientific extraction and treatment of the ores concealed beneath the surface of the Peninsula, but hitherto it has failed in its object.

About the middle of the thirteenth century Germany began to turn its tin mines to account, and soon acquired, in this branch of metallurgical industry, a superiority which induced Queen Elizabeth to import German engineers and workmen to improve the imperfect processes of our English mines.

But undoubtedly the richest and best-worked mines in Europe, even at the present day, are those of Devonshire and Cornwall, though it is said that their production is declining. The annual amount raised exceeds sixteen thousand tons of dressed ore, or nearly eleven thousand tons of the metal.

A certain quantity of tin is brought from Asia, and especially from the Island of Banca, in the Indian Archipelago, belonging to the Dutch Government. The mines of Banca were accidentally discovered early in the eighteenth century, and they exceed in wealth even those of Cornwall.

The ores of tin are called—

Tin pyrites, or sulphide	tin {	Containing tin, copper, iron, sulphur, and earthy matters, and sometimes zinc.
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Tin-stone, or bi: oxide of tin, and wood-tin, or Cornish tin ore	{	Containing tin, iron, and oxygen, with a little siliceous matter.
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Tin ore is found in veins, from which branch lesser veins, like the boughs of a tree, until they become as fine as threads. It is also found in floors or layers, and in grains and small masses, in the natural rock. Tin mines are not as deep as others; but in a few places they have been carried far under the sea. In these mines the roar of the waves sounds like thunder, and the water sometimes streams through. Great care is necessary to prevent its breaking in in such quantities as to drown the miners. Upon the discovery of a spot containing tin ore, the miners sink a pit or shaft, and follow the vein underground in levels or galleries, about six feet high and four feet wide. These are driven horizontally along the course of the vein or veins, one below the other, at intervals of from ten to twenty or thirty fathoms; and if these should be extended to any considerable distance from the original shaft, it becomes necessary, for the purposes of ventilation, to sink another shaft, which is made, as is also the first, to strike across the different levels or galleries. In the

space between these two a communication is also frequently opened up between two galleries by a partial shaft called a *wins*.

The excavations in the mine are mainly effected by means of gunpowder. It is said that the annual cost of the gunpowder consumed in the Cornish mines is £18,000 to £20,000. When the ore is blown off by the powder, it is broken into pieces, and put into a large bucket, which is hauled to the mouth of the principal shaft by means of a machine called a *whin*. This is a hollow cylinder of wood, or *cage*, revolving on a perpendicular axis, and worked by a steam-engine, or, in a small mine, by horses. As it rotates, the rope encircling it alternately coils and uncoils and raises one bucket to the surface, while the empty one is lowered into the pit.

As soon as the ore is raised to the surface it is *spalled*, or broken into small fragments. The ore is next pounded in the *stamping mill*, so as to separate the peroxide from the gangue in which it is embedded. From the stamping mill it is carried to a large vat containing water, where, by an operation called *tozing* or *tossing*, it is further cleansed and purified. The water is rapidly stirred with a small shovel by women or children, so as to bring the *tin-stuff* into a state of suspension. When this ceases, the tin, owing to its greater weight, sinks to the bottom, while the earth and other impurities circle at the top, and can be removed. The deposit in the vat is then smelted in a furnace, supplied either with turf or charcoal, and is poured into moulds to cool, after which it is ready for sale.

PROPERTIES AND USES OF TIN.

Tin, symbolised by the name of the planet Jupiter, in consequence probably of its brilliancy, approaches very nearly in its external appearance to silver, having a silvery, but yellowish-white aspect; which, after slightly tarnishing, remains of a permanent and dull white colour. In consequence of its softness, tin is deficient in elasticity, though if cast and placed in sheets one over another between rollers and hardened thereby, it is found to possess more elasticity than is usually attributed to it.

Tin is malleable—that is, it may be beaten out by hammering. Its malleability is made available in the manufacture of tinfoil, which is about one-thousandth part of an inch in thickness, and used extensively in the silvering of mirrors. Tin is one of the cleanest of metals, and will not rust from damp. It is therefore much used for coating other metals. What are improperly called *tin saucepans* are made of sheet iron dipped in melted tin, to prevent the iron from rusting. Lead, which is in itself poisonous, when it is mixed with tin forms pewter, of which drinking pots, &c., are made. Preparations of tin are also employed in dyeing and other useful purposes. Mixed with gold, it imparts beautiful crimson and purple colours to glass; with flint glass, it makes enamel. Vessels made of tin-plate are much lighter and more convenient for use than those which are made of wood. Sometimes tin-plate vessels are covered with a kind

of varnish called japan. Children's toys, such as little carriages and horses, are often made of thin tin-plate, painted and varnished. These toys are not only amusing to children; but the making of them finds employment for hundreds of industrious persons:

Our young friends will see that we have disregarded the strictly scientific portion of the subject relating to metals, and have looked only at some of the numerous useful purposes to which they are applied. The information now open to us in connection with the metals is so extensive that we have felt great difficulty in selecting the precise facts that would please and instruct "thoughtful boys." What we have aimed at, and what we hope will be achieved by these papers on the metals, is that our youthful readers may gain such rudiments of a knowledge of them as shall lead them to inquire yet further how the raw mineral product of our earth is transmuted into such heaps of precious and useful metals. For the present we must leave them, intending, however, to notice their use in some of the arts at a future time. In our next we shall commence with the "Precious stones."

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XV.—THE CAMEL.

 IN the structure and endowments of this remarkable animal we shall see one of the most perfect and beautiful illustrations of the direct adaptation of suitable means to a desirable and beneficent end that the whole field of Nature presents to the human vision. Without the camel vast tracts of the earth would be absolutely impassable, and countries and peoples that are now brought together in a commerce that is of mutual advantage would be practically as far asunder as if they occupied different worlds.

The camel is now seldom or never found in a wild state. In those parts of Asia and Africa where it is common, it is as much domesticated as the horse with ourselves, and performs all the services that the horse can render, and many others peculiar to itself besides. As a beast of burden it has great power of endurance, and most of the larger species carry with ease a thousand or twelve hundred pounds. There is a smaller kind that differs from the ordinary camel, just as the slender but swift racehorse differs from the huge and powerful cart-horse that drags behind it a well-loaded railway dray. This is called the dromedary, and is usually employed for its swiftness. It can carry but a small burden, but it can perform a journey of over six hundred miles in four or five days with ease.

The camel is of great value, because it can so easily cross those vast deserts that abound in Africa and Asia. On these deserts the rain never falls, and the drops of the dew are never seen, and vegetation is either totally unknown, or is of a very scanty character. For hundreds of miles it is one vast unchanging sea of burning sand. But the camel has powers by which the deserts may be traversed, and is as plainly made for the purpose of crossing these pathless wastes as the eye was made for seeing. It has natural powers of storage for both food and water of the most surprising kind. The large hump on its back may present to the eye unused to it an unsightly appearance, but its great practical value more than makes up for any apparent blemish to its beauty. It is a store of fat accumulated by feeding at ease in fruitful pastures, from which the animal draws when on its long and tedious journey. For weeks at a time it has to subsist on "short commons," and the hump ekes out the scanty supply of food, and supplies all the nutriment required. When starting on one of its long journeys this hump is very large and full; at the end it is nearly exhausted, and it is only by rest and abundant food that the animal can recover its proper condition again. But it has the power of storing water as well as food. Its stomach is so constituted as to guard against the perils of drought. Over and above the usual complicated arrangements common to all animals that chew the cud, there is a compartment fitted up with cells capable of holding a provision of water ample enough to last six days or more, and from which the animal draws its daily supplies. The merchantmen have often saved their own lives in the desert, when water has been inaccessible, by killing one of their camels and obtaining the water which they well knew the animal had preserved for a time of need. On account of these peculiar and valuable properties, and from the fact that it is only by its means that merchandise can be transported across the vast oceans of sand, the camel is poetically called "the ship of the desert."

Its senses of both sight and smell are peculiarly acute, and are of great advantage to travellers in guiding them to such pools of water as they may occasionally pass near. The existence of water becomes known to the camel while he is still miles distant from it; and as soon as it becomes known off he starts for it as straight as a shot discharged from a gun. The eyes are protected from the glare of the sun and the whirling particles of sand by long eyelashes; and the nostrils by a muscular action, capable of being exerted at will, can be so closed as to make the entrance of the sand in a windstorm impossible.

It has a wonderful prescience by which it knows when those perilous and destructive winds, known as simooms, will blow. These are storms of hot sand, and if caught by them unprepared death is inevitable to both man and beast. But just before they come the camels of a caravan will cry out, and run together, and hide their noses in the earth. The men then instantly fall on their faces, and

with closed eyes and mouth, and nostrils protected by their garments, they wait until the storm is over, and the camels lift up their heads and proceed on their journey.

The legs of the camel are long and slender, and so also is its neck, and all their movements exceedingly free. It is hereby enabled to pluck at such grass or trees as on its journey it comes across. Its chances of this kind are so very few that it takes good care not to lose any of them. The foot is broad, and provided with a soft pad, which is protected by a thick sole from the burning heat of the sand. When the animal bears a heavy load, and it sets its feet on the soft, pliable sand, the sand does not yield any more than the soft snow yields beneath the tread of an Esquimaux when provided with large snow shoes. The woolly hair of the camel is admirably adapted to the conditions of its life. It effectually protects the animal from the solar heat, and at the same time prevents its being injured by the keen frosts that in some parts of the year are experienced during the night.

It is common for caravans to cross the deserts for the conveyance of merchandise and of passengers, composed of as many as three and even four thousand camels. The amount of provision carried for the animals is infinitesimally small. Fed once in twenty-four hours, and then fed only with a small bale of barley and dried dates, they will go cheerfully forward week after week. Of their patience and obedience every traveller speaks in highest praise. They kneel down to receive their burdens, and rise up when they have been loaded with their accustomed freight. The skin is exceedingly thick and strong on their knees and breasts, that they may be well protected when kneeling or reposing. They have power to tell when they are overburdened, and too much good sense to attempt the impossible. Accordingly, if the burden imposed upon them is too heavy they cry until it is removed, and will not, except on great compulsion, make any effort to rise before.

Camels were known to the Egyptians very early, for they gave some to Abram when they treated him with special favour. Job in the time of his greatest prosperity had six thousand camels. They are frequently mentioned in Scripture, and very often as tokens of peace and prosperity; as, for example, in Isaiah, where the land of the Jews, as a signal mark of God's favour, is to be covered with a multitude of camels and of dromedaries. They appear to have been used not only for riding and as beasts of burden, but even for purposes of war. The milk and the flesh are commonly used for food, and from the hair both garments and tent-coverings are made. The raiment of John, we are told, was of camel's hair. So manifold and so great are their uses in the East that it is no wonder that the wealth of the greatest men should for ages have consisted in having a large quantity of them. In the year 1676 the King of Persia had seven thousand of them, but this great wealth excited the cupidity of the Tartars, who by resistless force carried off three thousand for themselves.

Without the ocean, as we have already shown in a past article, this earth would be as barren as the moon. But the sea that separates nation from nation is by man's ingenuity actually turned into a channel of intercourse and bond of union. The sandy deserts, like the rolling waters, have magnificent purposes to answer in the great economy of Nature; their influences on climate and atmosphere are all-powerful. But God does not suffer them to divide the nations of the earth. By the creation of the camel what would otherwise be a barrier, huge and insurmountable, is transformed into a great highway, along which all men may easily pass to and fro. This animal is therefore one of the most useful servants man has; and every reflecting mind sees in its structure and habits, so strikingly adapted to its circumstances and man's necessities, a standing proof of the wisdom and beneficence of the great Creator.

TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CHAPTER VI.—RESCUED.

IT was Christmas eve. The time when those who have homes hurry to them. The night when our railway stations are crowded with the thousands of those who leave our towns and cities and rush off to the scenes of earlier days. Who can describe all the feelings which steal over those of us who are fighting the hard battle of life as Christmas comes? Leaving the study, office, or factory, we seize the carpet-bags, cram into them the presents we have purchased, and off we go. Some make for home where wife and children are, and here they bring out the treasures, whilst all the children stand round, each anxiously waiting for his share. The merry laugh goes round and all is joy. Others at this season hurry off to the village home of their childhood. Once a year at least they like to come up to see the old folks, and some of those things which pleased them so in earlier days. There are the village church, the parsonage, and the squire's house, all standing just as we have ever known them. And yonder stands the old cottage with its wicker gate and little garden, only somehow looking a little bit less than we thought they were. Inside the cottage we find the same old arm-chair and the rocking-chair, and the same dear old man and woman whom we call *father* and *mother*, sitting in them; but they look far more feeble and old than they used to do. But how we like to see them for all that! Christmas is indeed a happy season to those who have homes and friends. But what about those who are poor, and, like Tom Foster, have neither home nor friends? God help all such!

It was Christmas eve. Mr. and Mrs. Turner, their son and daughter, and apprentice all sat round a good fire. As early in the eve as they could they had finished work, made up a good fire, put on the Christmas log, and sat cracking nuts and jokes, waiting for Christmas appearing, that they might hear the Christmas carol sung by the choir from the village. With them the eve went pleasantly on.

"What a wild, cold night this is!" said Mrs. Wood, as she drew nearer the fire and took the poker to break it up. About this they were all of one opinion. The wind howled past the house and beat the snow against the window. "May God help those who are without homes to go to on a night like this," said Mr. Wood. "Ah! yes," said Mrs. Wood, as she looked at her children so happy and warm.

"Do you really think, father, that there are people without homes of any kind?" asked their daughter.

"I am sorry to think there are," replied Mr. Wood; "don't you remember reading that story about a poor boy who was found dead in the snow?"

"Yes," said she; "but somehow I thought it could not be true. I have read several such stories, and begin to think they are made up to please and interest those who are fond of such reading."

"You are mistaken, Mary," said her father; "some of them may 'be made up,' as you call it, but I can assure you that many of them are but too true. William," said he, addressing the apprentice, "just spread that sack outside the door to keep the snow from beating in, and I will tell you a true story."

William took the sack and opened the door to do as he was bid. At that moment there came, through the open door, a piercing cry of distress. "Whatever is that?" they all said at once. Up jumped Mr. Wood and went out, followed by the apprentice. "It sounded like coming over there," said Turner, as they walked a few yards from the house.

Mrs. Wood and her children were in a state of dreadful excitement during the next few minutes. "Suppose it should be some poor thing, such as we have just been talking about, without home?" said Mrs. Wood. "If it is, you will take it in, won't you, mother?" asked Sam, her boy. "That I will," said the good woman.

Just then Mr. Wood and Turner, who had been out of sight for some minutes, reappeared, carrying with them the cold, and apparently the lifeless, body of Tom Foster. They soon discovered that he was not dead, and this increased the excitement. Turner was despatched for the doctor; and, as if by magic, out came blankets, flannels, water bottles, and other things. A bed was soon made up and Tom laid upon it, and everything done that could be to restore warmth and get up circulation. The doctor, who happened to be at home, was soon in attendance, examined the boy, gave directions, and said, before taking his departure, that the lad might be brought round.

CHAPTER VII.—THE WAY OPENING.

IF Tom Foster had been the only son of Mr. Wood, that gentleman could not have been more anxious about him; whilst Mrs. Wood and her daughter attended him as only a mother and a sister could.

There had been a good deal of speculation about him. They had tried to make out who he was, where he came from, and where he was going. They examined his old clothes before burning them, to see if anything they contained would help them to get his name. In the inside pocket of Tom's old jacket they found the little Testament. Mr. Wood opened it and read from the cover these words: "To my dear wife, Elizabeth Foster."

Both the book and the inscription pleased them very much. They came to the conclusion that the giver of that book must have been the boy's father, and the receiver his mother; and said Mr. Wood:

"Poor as this lad is, I am inclined to think that he has had a good father and mother. I am both surprised and pleased to find the New Testament in that poor boy's pocket. And," continued he, "what pleases me most is to find that the book has been well used. If his mother has used it so well, it speaks well for her, and also for her boy. As a rule, good mothers make good children. But if it has been used thus by the boy, it looks better still."

"Whoever he is, and whatever he is," said Mrs. Wood, "I am thankful that we have been able to save him from dying in the snow. If his mother be dead, as I am inclined to think she must be, I hope she has gone to heaven. If she be in heaven, and can see her poor boy now, I am sure she will glad to know that he is in the hands of those who will not send him away until he is better."

After saying this, she bent over him and, with all those feelings which none but a mother can understand, she kissed him. At that moment Tom opened his eyes and said in a sweet voice: "Mother! mother! don't leave me yet!" This was the first time he had spoken since they brought him into their house the day but one before. It almost seemed as if the kiss of Mrs. Wood had broken the spell of some sweet dream and woke him up. For the next few moments he lay quite still, and then, as if consciousness had returned, he turned his head and looked about him, to make out, if possible, where he was. The last thing he could remember was the swimming in his head and falling down in the snow. Now he found himself in a good warm bed, in a nice room, with kind-looking people at his bedside.

"Where am I?" said the lad. "Among friends," said Mrs. Wood, "who will take care of you until you are better."

"Thank you," said Tom, and closed his eyes for a minute or two, during which they saw, or thought they saw, his lips move.

"If you please, did you find a book in my pocket?" inquired he, a few minutes later. "Yes, here it is," said Miss Wood, as she held up the Testament. "I am very glad it is not lost," said Tom. "I should like you to read a little of it for me, if you would be so kind." The

girl read him a few verses from one of the gospels, during which time he lay with his hands upon his breast, evidently drinking in all she read.

After the reading he took a little food and seemed much better. A few simple questions were put to him, all which he answered, and then told his story as well as he could with his little strength. As Tom spoke, Mrs. Wood and her daughter cried, and even Mr. Wood coughed when he did not want, blew his nose often, and one or twice wiped a little moisture from the corners of his eyes.

There was a short silence when he had finished, during which, being exhausted with the little effort he had made, he fell asleep. Mr. and Mrs. Wood retired from the room, leaving their daughter to watch with Tom. When they were alone in another room, Mrs. Wood said: "I like that lad, and wish we could do something to save him from want."

"So do I," said the husband; "but what can we do? He shall remain here until he is better, but after that I do not see very clearly what we can do for him."

"Neither do I see *very clearly* yet," said she; "but I was thinking that as you go to town every week, and know a great many shopkeepers there, you might, perhaps, when he is strong enough, be able to find a place for him with some of them."

"So I might," said he; "that is a capital idea; I wonder I did not think of it before. Now that you have named it, I remember that only last week Mr. Trueman was saying to me how hard it is to get good honest boys, and that he could find work for two if he could get them, and would be glad if I could recommend one or two to him from the country."

"Indeed," said the wife, "then I should like you to speak to Mr. Trueman about Tom. If he would take him, it would be a good place for him if he proved himself to be worthy of it."

"I shall be there on Thursday next," said Mr. Wood, "and will have a talk to him about it. In the meantime the boy must be cared for. I can safely leave that to you. I know that in your hands he is as safe as he can well be."

Perhaps we ought to tell our readers that Mr. Wood was a sort of general dealer. The village was too small to support shops of every description such as are found in almost every public street in large towns and cities. He therefore made it his business to keep everything in the wearing line, from a row of pins to a suit of clothes; in usables, from a farthing candle to a washing-tub; and in eatables, from a bit of salt to a bag of flour.

BAND OF HOPE PAPER.

BEN AND I.



kept rabbits together, Ben and I. That, in truth, was the only link which united us. We were alike in our strong partiality to these boys' pets, and Ben was known as a capital judge. I, therefore, joined him as a partner. He found the skill and I the capital, so between us we managed to secure stock which was the pride of the village. In one or two other ways we were thrown together a little. He was a scholar in our Sunday school, and though I never attended I used to see him in public worship at the chapel, and he was a pupil in our day school, where I joined him occasionally in sundry games. Still, our acquaintance never ripened into friendship. He was much older than I; his tastes, with the one exception already stated, were unlike mine, and his relatives (save a sister who was a much-respected servant of my mother's) were people with whom I could not consort.

One of them kept a famous inn in the village, "The Coach and Six." He was Ben's uncle on the mother's side, and had gained notoriety as an expert prize-fighter. In those days that brutal sport was dignified as "the noble science" by blacklegs, rich and poor, and "The Coach and Six" was patronised extensively as a head centre of pugilistic celebrities.

Ben used to call in daily or nightly, and from early boyhood drank, though seldom heavily, of the intoxicating cup. He was tall, handsome, amiable, and generous. Few boys in the village were less inclined to quarrel, or more ready to forgive a wrong, than he. Indeed, for years he was called a coward by reason of his love of peace, and refused many a challenge to fight from boys scarcely half his size, although he could have "knocked them into fits" in five minutes.

But at the village wakes, in the year when Ben became twenty years old, his whole life got turned into another current—unhappily the wrong current. Carousing at "The Coach and Six," he drank on the "Feast Monday" more heavily than ever before. The conversation turned, as usual, on boxing, and his pugnacious uncle raised the laugh against big Ben for "his gentle Jesus sort of temper," as it was irreverently put.

Stung to bitterness and defiance alike by profanity and provocation, Ben challenged his uncle to fight, greatly to the consternation of all who knew his opponent's skill and his own utter inexperience. But into the adjoining croft the eager company went, where Ben so thrashed the old pugilist as to bring him within an inch of his grave. The news fled quickly, and from that day Ben was a lost man. "Noblemen," with nothing noble but the name, courted and caressed him. Everybody must "drink his health," and treat him to "just one glass." No longer could village life be endured. To

London he must go for "training." Feasting and fighting, became an idol and a sot. Battle after battle he fought until he won and wore the silver belt of "The Champion of all England." His patrons put him in possession of a famous hotel in the metropolis, which became for years the busy resort of bullies and blacklegs, great and small. In the zenith of his fame he came down to his native village to marry his cousin—the daughter of the uncle whom he had nearly killed, and who, in consequence, became his enthusiastic admirer! The day was observed as a general holiday, and the deeds of publicans and sinners on that occasion formed the blackest page of our village history. Years rolled on, and though Ben seemed to prosper, yet his heart was ill at ease. He came at times to H——, and admitted to former friends that he had made a fatal mistake in that old "Coach and Six." There were moments, he confessed, of sad and solemn thought, when all the past became "vanity and vexation of spirit," and when, in all their vital force, he felt the powers of the world to come. In an agony of remorse he would weep as though his heart would break, and we, who knew the native nobleness and tenderness of that heart, could not but pity his condition, and call down a million curses on that horrid drink which first maddened him to fight, which next enslaved him, and by which he was now bringing up a family and hoarding a fortune.

But reverses came!

In 18—, through neglect occasioned by intoxication, his hotel took fire in the night-time, and all his children, save a son, perished. This appalling calamity so affected his wife that she soon after died broken-hearted. To "drown his troubles" poor Ben drank harder than ever, and of more ardent liquid. Cursing the demon by which he was led captive, and the day on which he first yielded to it, he lived on in untold misery for a few more years. At length he died as he had lived, leaving his only son the bad legacy of a London drink-shop and a dishonoured name. That son, not having lived out half his days, dropped into a drunkard's grave. They all now sleep in the old churchyard hard by our native homes. Ben by drink became a prize-fighter, a publican, and a miserable profligate, and died when a little over forty; I, by sobriety and grace, am in full vigour, have as much of heaven as is good for me on earth, and can boast of the proud distinction of having been

March 4, 1877.

A METHODIST PRESIDENT.

ADDRESSES FOR JUVENILE MISSIONARY MEETINGS:

II.

MR. CHAIRMAN, and Ladies, and Gentlemen all,

You have heard my dear schoolfellows plead;

You have heard the report, which I think I may call

A very fair statement indeed.

So I think there's no reason why I should prolong
 The meeting, by mere repetition
 Of the claims which to-night both the old and the young
 Have urged on behalf of our mission.

So I'll take it for granted we all are agreed
 That missions deserve our support ;
 And as my special business I'll earnestly plea
 On behalf of our next year's report.

We are happy again our kind patrons to meet,
 And, while thankful for former donations,
 We must ask you to-night your kind gifts to repeat,
 Or you'll blight all our anticipations.

The amounts which last year you so generously gave
 To the Mission Committee were sent,
 And ere this they've been forwarded over the wave,
 Or on missions at home have been spent.

So unless we can yearly provide such a sum
 As will balance our current expense,
 The Committee must send for our mission'ries home,
 And announce their complete insolvency.

Now, I'm sure you'd be vexed if such were the case,
 And I know we could certainly count
 On your help to prevent such a dreadful disgrace,
 By donations of larger amount.

But although there's no present occasion to fear
 That our mission finances will fail,
 If all help was withheld for one single year
 We should soon hear a pitiful tale.

And besides, the Committee desire to extend
 Their labours in various ways ;
 And this they can't do unless we intend
 That each year we will more money raise.

O what we could spare since this time last year
 To the mission box freely we gave ;
 And in the report you doubtless would hear
 What amount we have managed to save.

And besides, for some weeks a lot of young folks
 Have been working wondrously hard,
 Getting hard words, and kind words, and all sorts of jokes,
 As they begged with a missionary card.

And to-night we have striven our best to amuse,
 Instruct, interest, entertain ;
 And your faces appear as I look round the pews
 To say we have not tried in vain.

And having so done, there nothing remains
 But to ask for assistance from you ;
 And the meeting, I trust, will result in great gains
 To our missionary revenue.

Our motto is " Onward," and so we desire
 Each year to do better than last,
 And I hope the collection to-night will be higher
 Than has ever been raised in the past.

I think I need scarcely say anything more
 To urge you to liberal deeds ;
 You are generously prompt, as we've witnessed before,
 When 'tis one of the young folks who pleads.

So in closing, allow me again to commend
 To your notice our mission'ry cause,
 Which I hope you will help us to-night to extend
 In a way that shall merit applause.

* * * * *
 I was wrong when I said there was no more to do,
 For I then omitted to state
 That we now have the pleasure of waiting on you
 In your pews with collecting-plate.

TOM BROWN.

EDITOR'S TABLE.

A FRIEND has kindly furnished us with an extract from the *Leisure Hour*, which gives some account of Thomas Bilby, the author of the hymn, " Here we suffer grief and pain." (See INSTRUCTOR for January, page 23.) It appears he died at the age of seventy-eight, and had been for twenty-eight years parish clerk of Islington. He was a native of Southampton. In 1809 he enlisted as a soldier, and was eight years in the Army. He took much interest in juvenile education, and studied the " Infant School System " under Mr. Buchanan, whose seminary on Brewer's Green, Westminster, is said to have been the first *infant* school in England. In 1825 Mr. Bilby obtained charge of a training-school at Chelsea, where upwards of five hundred male and female teachers were instructed under his superintendence. In 1835 he went to the West Indies as inspector of schools, and introduced the new method of juvenile teaching into several of the islands. From his labours, in connection with the Rev. James Reynolds, the " Home and Colonial Infant School Society " took its origin. Jointly with Mr. R. B. Ridgway he published several works which have been largely useful in schools: " The Nursery Book," the " Book of Quadrupeds," and " The Infant Teacher's Assistant." The well-known hymn " Oh, that will be joyful ! " was first printed in 1832.

We cannot give M. M. T. our opinion on the identity of the English people with the Lost Tribes of Israel, for we have not formed any. The subject has never had our consideration, and the probability is it never will. We believe that the Lost Tribes of Israel are *lost*, and that all researches after their identity with any existing people are only so much wasted time and energy.

To Wm. Woodrow (Bath).—In explanation of the supposed contradiction between Genesis i., 27, 28, and ii., 18, it should be remembered that the first nine chapters of Genesis give three distinct histories relating more or less to the creation of Adam. In these histories there may be found variety of narration, but no contradiction of facts. The first history extends from the beginning of the book to the third verse of the second chapter. In that the fact that God created the human race of two sexes is summarily stated. In the second history, which extends from the fourth verse of the second chapter to the end of the fourth chapter, the fact is given with particularisation, and its object is not to give merely the record of creation, but an account of paradise, the original sin of man, and the immediate posterity of Adam. While the third contains mainly the history of Noah, referring, it would seem, to Adam and his descendants, principally in relation to that patriarch.

To X. Y. Z. (Ashton-under-Lyne).—The hymn beginning "From Greenland's icy mountains," was composed by Reginald Heber, Bishop of Calcutta, in the year 1827—at least, that is given as the date of its publication. We have seen it stated that it was written to be sung after a sermon preached in behalf of missions to the heathen, but cannot say whether such a statement is authentic. Perhaps some of our readers can. If so, we should be glad to hear from them.

A Constant Reader asks us to explain Matthew x., 34, and Luke ix., 56. In the former passage Christ says He did not come to send peace on earth, but a sword; in the latter He says He came not to destroy men's lives, but to save them. The words in Luke express a truth, but they are not the words of Christ, nor of the Evangelist Luke, as the three oldest manuscripts of the Gospel do not contain them. It is probably a gloss brought in from xix., 10, and Matthew xviii., 11, "For the Son of Man is come to save that which was lost."

If our correspondent wishes us to explain how Christ can be a Saviour of men's lives, and yet say He came to bring a sword on the earth, the task is not difficult. To ascertain a speaker's meaning it is not enough to consider the words he uses by themselves; you must also look at their connection, and see what is the drift of the speaker. This will show us that our Lord did not mean to say that He came to put a sword into the hands of His followers that they might slay their opponents; for His kingdom is not of this world, neither do His

servants fight. When Peter used his sword He told him to put it in its sheath, for they who used the sword should perish by the sword. His precepts were, "Resist not evil; love your enemies, bless them that curse you, do good to them that hate you, and pray for them which despitefully use you, and persecute you." And yet His coming should be the occasion of contention, and strife, and enmity. For though He was the world's benefactor, the world did not receive Him kindly. "He was despised and rejected of men." The world hated Him. Why? Because He was good and the world was wicked, and because He came to reprove the world for sin, and turn men away from their iniquities. Therefore the world hated Him. And He told His disciples the same reception awaited them. They should be delivered up to councils, scourged in the synagogues, and brought before magistrates for His sake. Hence He brought a sword into the earth. He was the occasion, though not properly speaking the cause, of the enmity and persecution which should exist. He came not to arm anyone with a sword wherewith to wound another, but He came to teach men so to live that their lives should evoke the hatred of others, and lead them to use the sword for their punishment and extermination. In fine, our Lord by these words—as the whole drift of his address shows—simply forewarned His disciples that they would as such have to meet with bitter and cruel persecution.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

MAY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
6 Christ's Last Passover	Matt. xxvi. 17—30	1 Cor. xi. 26.
13 Jesus in Gethsemane	Matt. xxvi. 31—46	Ver. 42.
20 The Betrayal and Arrest	Matt. xxvi. 47—58	Ps. xli. 9.
27 Jesus Accused and Denied	Matt. xxvi. 59—75	Heb. xii. 3.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
6 The Famine in Samaria...	2 Kings vii. 8—20	Luke xviii. 27.
13 Jehu the King	2 Kings x. 18—36	Rom. x. 2.
20 Jonah at Nineveh	Jonah iii.	Matt. xii. 41.
27 The Death of Elisha	2 Kings xiii. 10—25	Ps. cxii. 6.

JUNE.

MORNING SUBJECTS.			Golden Texts for Repetition.
SUBJECT.		FOR READING.	
SECOND QUARTER.			
3	Jesus before Pilate [fied]	Matt. xxvii. 11-25.	Isa. liii. 7.
10	Jesus Scourged and Cruci-	Matt. xxvii. 26-44.	2 Cor. v. 21.
17	Death and Burial of Christ	Matt. xxvii. 45-61.	Rom. v. 8.
24	The Conqueror of Death	Matt. xxviii.....	1 Cor. xv. 20.
AFTERNOON SUBJECTS.			Golden Texts for Repetition.
SUBJECT.		FOR READING.	
SECOND QUARTER.			
3	The Lamentation of Amos	Amos v. 1—15 ...	ver. 14.
10	The Promise of Revival...	Hosea xiv. 1—9...	xiii. 9.
17	The Captivity of Israel...	2 Kings xvii. 1-23	Isa. lix. 2.
24	Review of the Quarter's Lessons		Nah. i. 3.

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

INSTEAD of giving his nephews and nieces an enigma to solve, Uncle George this month asks them to send him short biographies of the three Johns mentioned in the New Testament. Below they are told who the Johns are whose lives they are requested to write, what information they must put in the lives, and where the information can be obtained. The exercise is intended to be one in composition as well as Scriptural knowledge, and probably the best sent may be printed in the JUVENILE INSTRUCTOR. Two things especially must be attended to by all who write—namely, brevity and correctness of expression.

THE THREE JOHNS.

1. *John the Baptist* — Who were his parents? Why was he called the Baptist? Where was his abode? What was his food, and what his clothing? What doctrines did he chiefly preach? Who imprisoned John? At whose request was he put to death? In what manner was he put to death? What became of his body? Read Luke i. 13—80; John i. 29—34; Matt. xiv. 1—12.

2. *John the Evangelist*.—Who were his father and brother? What was his occupation? Near what sea did he live? Who was called along with himself to be Apostle? What books of the New Testament did he write? For what grace was he most eminent, and on which he so much dwelt in his writings? With whom was he imprisoned, and on what occasion? To what island was he sent as an exile? Read Matt. iv. 21; Mark iii. 17; Acts iv. 3; Rev. i. 9.

3. *John the Missionary*.—What was the name of his mother?

What other name did he bear besides John ? He is described as " a minister " to the Apostles ; what does this mean ? Did he accompany the first Christian missionaries on their journey ? Who were they ? To whom did they go, and what did they preach ? Whom did he accompany on a second missionary journey ? Read Acts xii. 12—25, xiii. 1—5, xv. 36, 37.

ANSWER TO ENIGMA IN MARCH.

1. H-ebron, Josh. xiv. 15.—2. I-bzan, Judg. xii. 8-10.—3. G-erizim, Deut. xxvii. 12.—4. H-eman, 1 Chron. vi. 33.—5. P-eor, Num. xxiii. 28.—6. R-abshakeh, Isa. xxxvi. 2-20.—7. I-shbosheth, 2 Sam. ii. 8-10.—8. E-lisba, 1 Kings xix. 16.—9. S-amuel, 1 Sam. i. 19, 20.—10. T-almal, 2 Sam. xiii. 37.

HIGH PRIEST.

PRINCES END.—We held our annual juvenile missionary meeting on Sunday evening, March 18, 1877. This is at least ten weeks earlier than usual, so that the report is really for only forty-two weeks instead of fifty-two. The change was made because there are always so many other collections in this neighbourhood about May that a vacant Sunday can hardly be found. Last year, as on several former occasions, the money had to be advanced in order to be in time for the District Meeting, and as the effort proved more successful than the previous one, on the basis of which the amount had been estimated, we started this year with a balance in hand. We had a very interesting and successful meeting. The chair was occupied by our friend Mr. Edward James, who opened the proceedings with a short speech indicating some of the advantages to civilization and commerce which Christian missions always brought in their train. The secretary gave a few facts, numerical and financial, of our general mission work, and read the report of the local contribution to the Connexional Mission Fund. From this it appeared that though (in consequence doubtless of bad trade) there was a slight falling off in the receipts from cards and school boxes, this decrease was more than made up for by the extra income (more than double) from private collecting boxes. This is the pleasing result of a successful effort made last year to increase the number of missionary boxes distributed in the families of our people. Our respected superintendent minister, Rev. T. T. Rushworth, our old Sunday scholar, Mr. S. H. Bate, of Great Bridge, and our newly-appointed school superintendent, Mr. Alfred Cole, gave earnest and eloquent addresses in urging the claims of missions. A vote of thanks to the chairman concluded the most successful juvenile missionary effort Princes End has yet made. The following recitations were given :—

"A Happy New year"	Richard Attwood, jun.
"The Missionary Ship"	Lois Bishop.
"The Missionary Clock" (Dialogue)	Clara Wheale and Sarah Bradley.
"Gold, Silver, and Copper"	Joshua Eades.
"Harvesting"	Mary Stevens.
"Child of the Heathen Lands"	Annie Stanway.
"Missionary Speech"	George Cole.

The following is the financial report for 1876-77 :—

	£	s.	d.	£	s.	d.
By Balance in hand from last year	...	...	...	0	15	7
By Boxes :—Young Men's Select Class	0	7	10½			
" Young Women's	0	6	3½			
" First Class Boys	0	1	3½			
" Boys' School	0	9	7½			
" Girls' School	0	6	2			
" Mary Pinnock	1	5	1½			
" Martha Cole	1	4	9½			
" Walter James	1	1	0			
" Edward Eades	0	10	7½			
" Hannah Gould	0	10	0½			
" Samuel Partridge	0	2	0½			
" Ellen Jones	0	1	3½			
" W. H. Eales	0	0	4			
				6	6	5½
By Cards :—Lois Bishop	0	7	0			
" Samuel Onions	0	5	9½			
" Sarah Gallear	0	3	6			
" Sarah Sharp	0	3	8			
" Eliza Russell	0	2	6			
" Annie Stanway	0	2	2			
" Eliza Rich	0	2	1			
" Benj. Nightingale	0	2	1			
" William Turner	0	2	1			
" Eliza Whitehouse	0	2	0			
" Susan Millward	0	1	11			
" Lily Bissell	0	1	10½			
" James Smith, jun.	0	1	9			
" William Whitehouse	0	1	9			
" George Wellings	0	1	3			
" William Woodall	0	1	0			
" Edward Randall	0	0	10			
" Sarah Gwinnutt	0	0	9			
" David Round	0	0	6			
" Clara Whitehouse	0	0	5			
" Mary Wellings	0	0	4			
" Sarah Holland	0	0	2			
				2	5	0
By Collection at Public Meeting	...	...	...	5	8	2
				14	15	2½
Less Expenses	...	...	...	0	19	2
				£13	16	0½

WESLEY CHAPEL, LOUGHBOROUGH.—On Sunday, March 4, 1877, we held our annual juvenile missionary meeting. The attendance was good, and the meeting a very enjoyable one to all present. Our esteemed minister, Rev. T. S. Willetts, presided. A short report was read by the

secretary, after which the following recitations were given by the scholars of the school :—

"God is Love"	Thomas Newton.
"Hymn for Little Ones"	Ellen Norman.
"The Invitation"	J. G. Dennis.
"Little Words of Kindness"	Maud Perkins.
"'Twas Jesus"	Herbert Start.
"No Sect in Heaven"	Minnie Perkins.
"Open the Door for the Children"	Tom Simpson.
"Work"	Annie Frost.
"Lands Without a Bible"	M. A. Hodges.
"Go ye Messengers of God"	Walter Dennis.
"Who is my Neighbour"	Alice Draycott.
"Christian Forgiveness"	Fredk. Perkins.
"Action"	F. H. Simpson.
"Dialogue on Prayer"	H. Perkins and A. F. Wootton.
"The Missionary Ship"	Kate Brown.
"The Lamp"	W. A. Carpmail.
"The Bible"	Maud Perkins.

The collection at the close of the service was £3 7s. 2d., a small increase on last year. The scholars have this year collected by cards, given to them a fortnight previous to the meeting, the noble sum of £7 1s., being an increase of £1 7s. 1d. on the previous year; so that, in all, our juveniles have collected £10 8s. 2d., the largest sum we have ever contributed. The collectors were as follows :—Bertha Tebbutt, 8d.; J. T. Mee, 2s.; Lizzie Shaw, 2s.; Mary Storer, 2s. 3d.; Flora Barrowcliff, 4s. 2d.; J. W. Garner, 6s. 6d.; Alice Draycott, 7s.; S. E. Newton, 7s.; E. A. Scott, 7s. 2d.; Clara Barrowcliff, 7s. 9d.; Maggie Cashmore, 9s.; Annie Newton, 10s.; Clara Tillson, 12s.; F. H. Simpson, 15s. 7d.; Ellen Watts, 17s. 7d.; Ellen Faulkner, 12s.; J. G. Dennis, 18s. 4d. I may just state before closing that, as a reward for the earnestness in their work, the teachers gave a tea on Friday, 9th, to all engaged on the Sunday previous.—W. H. BAILEY.

Memoirs.

JOSIAH HORNER.

JOSIAH HORNER was born at Ballyclare, co. Antrim, Ireland, on 10th December, 1860. His parents and family belong to our Church, and at an early age Josiah came to our Sabbath school in Bethel. He was attentive to the instructions of his teacher, mild and amiable in disposition, and obedient to the commands of his parents. During the autumn of 1874 we had several weeks of special services, when a gracious work broke out amongst the young people, and a number were led to give their hearts to the Saviour. Almost the first to yield to the Spirit's

strivings were Josiah and an older brother. He commenced attending a Sabbath morning class-meeting and Bible-class, but owing to the influence of those with whom he daily associated at his employment, many of whom were careless and thoughtless about Divine things, he seemed to decline in his spiritual life.

About this time he had a severe attack of illness which laid him aside from his work for some weeks. On his recovery he went to work again, but soon had to give it up. After this he got better and worse for some months, but the illness was not expected to terminate in death. His father now took the advice of a skilful doctor on his case, and he gave no hope of his recovery. In my visits to him up to this period he gave me to know very little of the real state of his mind. On the night the doctor gave his opinion on his case Mrs. Nicholson called to visit him, she read a portion of Scripture, spoke very plainly to him, and offered up fervent prayer in his behalf.

She earnestly pleaded with him to pray for mercy, and pointed him to the only Saviour of the sinner, "the Lamb of God, which taketh away the sins of the world." He now became deeply in earnest about his soul, and was broken down in penitence, and ere she left him he told her that he felt that Jesus was his Saviour. From this time, when I called to see him, I always found him resting on Jesus. On the Monday I called and asked him how he had spent the previous day; he replied that he was weak in body, but he was trusting in Jesus, and in Jesus alone, to supply all his need. On another occasion, after praying, I said, "Can you trust in Jesus still for salvation, and do you believe that He has pardoned all your sins?" He replied at once, "I am quite certain of it." It was no ordinary privilege that our young brother enjoyed, to have all doubts and fears banished. From the time that he first believed on Christ he was joyful in the prospect of getting home to be with Jesus. His mother often on entering his room found him engaged in prayer. To his parents he spoke much, and always said, "I am going to heaven; I know Christ has a place prepared for me there;" and would add, "Do not by any means fret or repine about my death, for I am going to heaven, which will be far better." Mrs. Nicholson visited him a short time before his departure, and encouraged him to trust in Jesus, but he seemed to take no notice of what she said. His mother said, "Josiah, do you not hear what Mrs. N—— has said to you?" He replied, "I heard her quite well, but I am busy talking to Jesus." To a friend who observed that he slept much he said, "I will soon have a long sleep, and be sleeping in Jesus." There were heard no complaints from him, but he was always thankful for the least kindness shown him. The Lord was kind to him, and he did not suffer much pain until near his end. About half-an-hour before his departure he called his brothers to his bedside, kissed each of them, then said, "My dear brothers, be good to your parents, mind to serve God, and be sure to meet me in heaven." He then became speechless. His uncle, James Marshall, said to him, "Are you still happy?" He could not answer, but lifted up his right hand, showing that he trusted in Jesus. In a few minutes the tired wheels of nature stood still, and his happy spirit entered the heavenly paradise on the 23rd of January, 1877.

This is one of the first-fruits of our labours in Bethel Sabbath School gathered into the garner of God. attended his funeral and spoke at his

grave. On the following Sabbath I preached his funeral sermon to a goodly congregation of attentive hearers.

S. NICHOLSON.

Poetry.

NOT READY FOR SCHOOL.

PRAY where is my hat ? it is taken away ;
And my shoes-strings are all in a knot ;
I can't find a thing where it should be to-day,
Though I've hunted in every spot.

Do, Rachael, just look for my atlas up stairs,
My Æsop is somewhere there too ;
And, sister, just brush down these troublesome hairs,
And, mother, just fasten my shoe.

And, sister, beg father to write an excuse ;
But stop ; he will only say " No,"
And go on with a smile, and keep reading the news,
While everything bothers me so.

My satchel is heavy and ready to fall ;
This old pop-gun is breaking my map ;
I'll have nothing to do with pop-gun or ball ;
There's no playing for such a poor chap.

The town-clock will strike in a minute, I fear,
Then away to the foot I must sink ;
There ! look at my Carpenter tumbled down here,
And my Worcester covered with ink.

I wish I'd not lingered at breakfast the last,
Though the toast and the butter were fine ;
I think that our Edward must eat pretty fast,
To be off when I haven't done mine.

Now Edward and Henry protest they won't wait,
And beat on the door with their sticks ;
I suppose they will say I was dressing too late ;
To-morrow I'll be up at six.





THE DEAD RABBIT.

THE DEAD RABBIT.



YOUNG PEOPLE have a natural liking for animals. Most boys and girls will, if they can, have one of some kind to make a pet of; and where it is practicable it is wise to gratify their wish, for to gratify the desires of children in an innocent way is a very desirable thing. It makes them contented, cheerful, happy, and so puts them in a better frame to be teachable and obedient. Enjoyment is not the end of life as a whole, but it is an element which should enter largely into the life of childhood and youth. But enjoyment and indulgence are not the same thing. This is one of the first lessons which an intelligent parent will try to teach his children, and the possession of a pet or favourite animal by them will greatly aid him in his training of them to right habits and dispositions. Though nearly all children like animals, all do not like the same. The dog is a favourite with many, with some pussy has the preference, and with others the canary or poll parrot, and there is the tame rabbit, who does not like that pretty creature? It is a special favourite with most boys and girls. But rabbits are very tender things, and want a deal of attention and care if they are to do well. If their hutches are not kept clean, or if wrong food is given them, or food in improper quantities, they will soon sicken and die. A boy who has the care of rabbits must be very thoughtful and punctual in his habits, and so the keeping of them may teach him, in his early days, lessons which will be of great use to him in after life. It may do also in another way. Life comes to us all with duties, and pleasures, and sorrows. We are constantly telling young people how rightly to perform life's duties, but we greatly overlook doing what is equally important—namely, teaching them how to taste its pleasures and bear its sorrows. The boy and girl in our picture are taking their first lesson, perhaps, in this last particular. They have come to the hutch to find poor bunny dead. And how sad the discovery makes them, and how thoughtful! And there is the dog. He looks up into their faces and sees how sad they are, and he is sad too. But doggy's sadness won't last long, and I don't suppose he will remember anything about the rabbit next day. But these children will—at least, I think so, judging from my recollections of my own childhood's experiences, aye, and for many and many a day beside, and it will give them views and impressions of life which, if rather sober, will be very salutary.

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of "A Year at School," &c., &c.*

Letter No. 23.

FROM CHARLIE THORNTON TO BEN BARLOW.

High Street, Woodbourne,
May 29th, 187—.

MY DEAR BEN,—

What do you think! The next day after I wrote to you, Old Peter came into the shop while we were at breakfast. I jumped up to serve him, thinking he had been sent by someone for stamps or stationery, but instead of that, he said, "Master Thornton, I've brought my little dog Punch for you, for fighting that butcher fellow."

You recollect Old Peter's dog—a real Skye terrier, as comical a little animal as ever was seen, and as sharp as a needle. He will sit on his hind legs to beg, leap over a stick, and do other tricks. He is the prettiest and cleverest dog in the village, and I jumped for joy at the thought of owning him. But then it occurred to me that Old Peter would miss him very much, so I tried to persuade him to take the dog back. He would not, however, so he gave him a few parting caresses and left him with me. The dog seemed to understand the bargain, for he took to me all at once and seemed quite contented.

When I went back to breakfast and told father, he was sorry I had allowed Old Peter to leave him, for he said it was the only living thing he had to love him, and his life would be dull without the dog's companionship. So, in the dinner-time, I went to Old Peter and arranged that Punch should have his meals and sleep at our house, but that whenever his old master had an errand to go he should always call for the dog to accompany him as usual. Old Peter was delighted. I could see he had been a bit moped without Punch. The dog and he are now as happy as the day is long.—With kind regards, I remain, yours very truly,

CHARLIE THORNTON.

P.S.—How did you spend your Easter holidays?

Letter No. 24.

FROM MRS. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne,
June 4th, 187—.

MY DEAR BEN,—

I am glad you have at last found leisure to write to your mother, and I am very pleased to think that the cakes I send you are so much

appreciated by yourself and your joking friend Master Instone. You may assure him that in future I will recollect his preference for two kinds of fruit in his cake, though I am sure he will not feel hurt if I remind him of an old proverb, which says, "Never look a gift horse in the mouth," and which may perhaps apply equally well to a gift cake.

I should think your friend must be quite a musical enthusiast, judging from his interest and delight in the cathedral service on Easter Sunday. If his industry in its study are equal to his love for music, I should think it probable he may become a skilful musician.

Like you, I prefer a plain service to one so florid and elaborate as to be beyond the intelligence of the congregation. I fear that in most cathedral services the minds of the choir are too much occupied with the music to leave room for that devotion of which their music should be the utterance; though I do not say but there are some whose hearts would be lifted up in praise and prayer by the loud swelling *jubilate* and the pathetic *miserere* of a full orchestral service.

I am glad you are getting on with your lessons, though you appear to have thought of them only in time to mention them in a postscript.

You ask how the hawthorn bushes look. The first bloom we saw was quite a fortnight ago. Bob brought it from Upleigh with him. You may be sure we have had some in the house ever since. You know Bob loves flowers himself, and as he knows the sweet-scented May is a special favourite of mine, he has fetched a fresh bough of it directly the previous one has got withered.

You may be quite easy about your fowls and rabbits being well attended to. If Bob had never seen you, he would take care of them for their own sake, and if his dislike to such things were as great as his fondness is, he would attend to them out of love for you. He is looking forward with great pleasure to your holidays, and only yesterday was asking how long it would be till you came home.

Clare and Helen, too, are getting anxious to see you. They join your father and myself in best love to you.—Your affectionate

MOTHER.

Letter No. 25.

From BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
June 5th, 187—.

MY DEAR CHARLIE,—

We are busy getting ready for the break-up examination, or else I should have answered your first letter before. Now that I have got another, I must find time somehow.

I did envy you fellows your week's holiday at Easter. We only had half a day on Good Friday and a whole day on Easter Monday.

We had the football out on the Friday afternoon, but didn't play a regular game—merely knocked it about for exercise.

On Sunday a few of us went to morning service in the Cathedral. It was grand—full choral service, you know—solos and choruses, like they have in the Hammerthorpe Town Hall at Christmas.

On Monday we spent nearly all the morning on the Severn. There were a lot of excursionists there about noon, but we were on the ground first and had our choice of the boats. It is a nice river to row on. You can go for a long distance without any sharp turns, and it is wide enough for a lot of boats to pass each other with safety. We are going to form a boating club, with Mr. Macpherson for captain. He has won several prizes for rowing on the Severn.

Talking about rowing reminds me of another thing. Father tells me Dr. Tasker lamed his leg by jumping into the water to rescue a little girl who fell off the bridge during a boat-race. And, what do you think, that little girl became his son's wife! I was introduced to her a few days ago.

I say, Charlie, you are in luck to get Old Peter's Punch given you. I would have given half-a-dozen of my grey rabbits for him. He's a perfect beauty! I think I know why father didn't blame you for fighting the young butcher. It was because you were defending somebody else, and not doing it on your own account. He would not so much mind me doing that, only he seems to think I should jump at the chance just for the sake of fighting.

Remember me kindly to your father and mother, and believe me,
yours affectionately,

BEN BARLOW.

Letter No. 26.

FROM BEN BARLOW TO DR. BARLOW.

Waterside House, Worcester,
June 12th, 187—.

MY DEAR FATHER,—

It seems my friend Ted Instone has been writing to his father and mother about me, and they have told him to give me a pressing invitation to spend a part of my holidays with him. Can I go? I should like it so much. You know I have never been to London, and Ted says his elder brother, who is in one of the Government offices, will have a holiday at the same time, and he can take us about and show me all the grand places in London.

If you and mother consent, I think it would be better for me to go home with him and spend there the first week of my holidays; because Mr. Jones' school won't break up till a fortnight after us, and so, if I came home, I could not have much of my old schoolfellows' company for the first ten days.

Please let me know by next post if I can go? Do, please, let me? Ted will be quite disappointed if I do not, and so shall I.—I remain,
dear father, your affectionate son,

BEN.

Letter No. 27.

FROM DR. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne,

June 13th, 187—.

YOU UNGRATEFUL YOUNG RASCAL,—

Is this the return you make for our kindness in sending you to a good school? We have reared you, fed you, and clothed you, and now, at a great expense, are trying to educate you; but instead of your gratitude prompting you to hurry home the moment you can get away from school, and thank us for the benefits you enjoy, you want to post off across the country, with a companion you had not seen six months ago, to spend the prime of your holidays with folks you never yet saw.

Now, my dear Ben, I don't for a moment suppose you love us any the less, though you had for the moment forgotten to consider our feelings in your eager anticipation of a holiday trip to London; but I have just shewn you how some people might have looked at it.

Well, as to my consent, I don't know Ted Instone or his parents. Though a little too fond of joking, I gather from your letters that he is good natured and honourable in his dealings with others. And since both he and his parents wish it, I cannot object to your paying them a visit for a few days, but I only consent on the condition that Master Instone will return the visit and spend a week with us here. Village life is often as charming to city bred people as London is to country folks. I am somewhat curious, too, to see what sort of a boy you have chosen for your friend.

If Master Instone's parents consent to this, you may reckon on the visit: but, mind you, it must not be the *first* week of the holidays. Your mother insists on your spending the first week at home. If her love did not prompt this, it would doubtless be necessary from other considerations. I expect it will take quite a week to replace missing buttons on your clothes, and in other ways make them fit for their introduction into civilised society.

You had better arrange to spend the second week of the holidays with Master Instone in London, and then bring him to spend the third week with you here. You will thus be just in time to join Charlie Thornton, Tom Blunt, and the rest of Mr. Jones' scholars in their holiday sports.

Your mother and sisters join me in sending love to you.—Believe me, your affectionate father,

OLIVER BARLOW.

Letter No. 28.

FROM BEN BARLOW TO MRS. BARLOW.

Waterside House, Worcester,

June 16th, 187—.

MY DEAR MOTHER,—

I do hope you did not feel grieved at my proposing to spend the first week of my holidays at London. I can assure you I am

very anxious to see you and father and sisters, but I thought it would be very much easier for me to go with Ted, because he understands all about the trains and junctions, and that sort of thing. I see now it will be better for me to go the second week. I dare say father can tell me where to change trains, and Ted has promised to meet me at Willesden junction.

Ted got a letter this morning from his father, giving consent to his spending a week at Woodbourne, and thanking you for the invitation. So it is all arranged now. I am so glad, and thank you very much.

Dr. Tasker has decided that the examination shall be on the 20th. We shall break up on the evening of the 21st, and leave for home by early train on the 22nd. So I shall be with you all about eleven o'clock on the Thursday morning.—Till then, I remain your affectionate son,

BEN.

Letter No. 29.

From BEN BARLOW to "BOB."

Waterside House, Worcester,

June 16th, 187—.

MY DEAR BOB,—

All being well I shall be at home about eleven o'clock on Thursday week. I shall stay at home till the next Tuesday or Wednesday, and then go to London for a week to stay with one of my schoolfellows. Then he will come home with me for a week.

Now, Bob, I want you so see that the place is all tidied up as well as possible. Have the rabbit hutches and the fowl pens nice and clean and sweet. Master Instone—the young fellow who is coming home with me—doesn't care much about livestock, only horses and dogs. He says they always smell badly and become a nuisance. So I want mine to be as neat and trim as they possibly can be.—Hoping you are well, I remain, yours truly,

BEN BARLOW.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XVI.—THE MONKEY.



OF all irrational animals the monkey, in general resemblance, most nearly approaches to man. It is furnished with hands instead of paws, and its ears, eyes, eyelids, lips, and breasts have a conformation not altogether unlike our own. It can be taught to walk upright after a fashion, and readily imitates man in many of his movements. In consequence of the new theory of development, by which it is held that the most beautiful and complete forms of animal

life have been evolved from earlier and simpler forms, the monkey has latterly received a great deal of attention. Some philosophers have regarded him as the missing link in the chain wanted to complete the connection between ourselves and our four-footed friends. They have been bold enough to assert that the monkey is one of our remote ancestors from whom we have drawn our being. It does not become us to be too proud to acknowledge our poor relations, and if the monkey be akin to us we had better own him, but his relationship must be clearly established before we can be expected to show for him a very rapturous regard. But when we look for proofs of identity of nature, we find undeniable evidence of difference, and, notwithstanding his general resemblance to man, the monkey is really less near to him in nature than he is to the worm that crawls in the dust. Every fresh investigation shows that not only is man the apex to the pyramid of the animal creation, but that he is endowed with a dignity and glory of being that transcend everything that is of the earth earthy, and reaches forth to the angelic and heavenly.

In confutation of the theory of the transmutation of the monkey into the man, there has been a most formidable array of argument by some of the most able of scientific men; but it is doubtful whether the theory was really worth the attention it has received. The conclusion of Professor Owen we may give as representative of the judgment of numerous other equally able men: "Nine-tenths of the differences that distinguished the ape from the human species *stand in direct contravention* of the hypothesis of transmutation and progressive development."

Monkeys are generally divided into four classes: the apes that are entirely without tails; the baboons with short tails; the monkeys with ordinary tails; and the monkeys with prehensile tails. The tail of this last division is as good as an extra hand, and can grasp firm hold of anything the animal feels inclined to seize by it. Of the gorilla very little was known until within the last few years, and for all our present knowledge we are indebted to the travels of Du Chaillu in Central Africa. Some few naturalists think the gorilla should be constituted a genus by itself; most others are of opinion that it should be classed with the ordinary apes, from which it only differs by its enormous size, and strength, and fierceness.

Monkeys, as seen in our own country, present a somewhat comical and undignified appearance. But they who are best acquainted with their natural mode of life, and the place intended by Providence for them, always regard them in captivity as objects of deep commiseration. Their captors cannot reproduce the healthful conditions of their forest life. A state of captivity can be rendered more tolerable for a tiger than for a monkey. Monkeys have a world of their own. Just as the land is given to us, and the air to the birds, and the sea to the fishes, so there is a domain peculiarly theirs, and that is *the trees*. The extent of tropical forests is amazing. Livingstone also travelled in Central Africa, and Humboldt, who travelled in South

America, speak of forests which must stretch uninterrupted for hundreds of miles. The monkeys are made for the trees. Their entire structure is adapted to their leafy habitations, which supply them with the shelter and the sustenance they require. Probably many of them never set foot on the earth so much as once during their whole lives.

Just as the structure of the swallow differs from other birds, enabling it to be all day on the wing without growing weary, so the structure of the monkey differs from animals that live on the ground, and renders its life in the trees easy and agreeable. The head is differently fixed to that of man, being thrown more forward. The spine is possessed of greater power than that of the human frame. The bones of the leg and arms are made longer, for the purpose of giving greater length to the muscles. The construction of the feet show that they are not intended to walk on the ground—it is only on the side and not on the flat of their feet that they can walk at all; and that this is a painful position is seen by their taking reluctantly to it. Their feet, moreover, are so delicate that stones would cut them sorely. The face has a grotesque resemblance to that of man, and their teeth and organs of digestion are somewhat similar. Their tastes are naturally simple, and they feed mainly on fruits and birds' eggs, but in captivity they speedily degenerate, and show a great fondness for all kinds of rich food, and especially for gin-and-water and other alcoholic drinks.

Monkeys are great mimics, and will imitate men to any extraordinary degree. In a state of captivity they will attempt almost everything thing they see their masters do, but it is plain that even where their tricks are most successful they are done with no presiding intelligence, and are no more understood than the parrot comprehends the meaning of the words it is trained to speak. The mimicry of the monkey has supplied our language with a verb—to "*ape*." But this is not a faculty that captivity develops; it is best seen in their native forests when, with all kinds of curious somersaults, a whole troop of monkeys play at "follow the leader."

Some of them, as already mentioned, have tails by which they can hold on to the branches of trees, and by which, strange to say, they can carry a stick, or a bunch of fruit, or any similar object. And, besides their hands, all of them have a peculiar arrangement of the foot by which they can securely fix themselves in any desired position. Instead of having a big toe, they have a thumb, and they may be commonly seen holding on a branch by means of feet, or feet and tail, and using their hands to reach their food and get their dinner. They can skip and run up the stairs that the branches form to the top of their airy houses, or they can rapidly pass from tree to tree with a grace that is only equalled by its dexterity. Their natural attitude is neither that of the beasts nor the erect position of man, but something between the two. When they descend to the ground and attempt to walk erect, they are clumsy and ungainly; but among

the branches of the trees their movements are as graceful as the flight of a bird, and their playful gambols are as amusing as the antics of a squirrel or the evolutions of a kitten. A monkey swinging from tree to tree, and living just as Providence intended, is a pleasing sight; but when he aspires to walk erect like a man, he makes himself as ridiculous as if he were to don the ermine and wig of a judge and attempt to deliver judgment.

Monkeys are unlike almost every other animal, in the fact that they have no nests or holes, or any sort of local abiding place. From tree to tree they gaily rove in search of food, living a merry life, and having the fewest housekeeping cares of any living creature. The young ones always stick close by their mothers, and ride upon their backs until they are able to shift for themselves. They are never under the necessity of revisiting any particular spot, and have no preferences save for those forests that afford the most ample supply of food. They are, indeed, endowed by Nature with a couple of pockets, in which they carry a short supply sometimes. These pockets are called "pouches," and are placed in their cheeks. It is generally supposed that a schoolboy's pockets will hold a bit of everything; but a monkey can stow away in his "pouches" about as much as the pockets of half-a-dozen schoolboys would hold.

The natural home of the monkey is the tropical climes, and, with one exception, he is never found elsewhere. The Rock of Gibraltar forms that exception; and to find monkeys making themselves at home there is as puzzling to naturalists as if they should find fishes who left their briny home for the purpose of living in nests at the top of trees.

The fact of monkeys being confined to warm countries and flourishing there alone suggests a very striking contrast to men, whom they are supposed to be so near. Men can wander freely all over the globe, not by any means because of hardy physical organization, but because endowed with a mind that can anticipate their necessities and provide for them. The structure and habits of the monkey are, as we have seen, very wonderful, and the more prolonged our inquiries the greater are the proofs of a Divine and superintending hand. But even the creature that comes nearest to man is yet an almost infinite distance from him, and makes no pretension to intrude on his unique and peculiar position. If, therefore, anyone should any more tell us that the ape is our great-grandfather, it is sufficient for us to reply that the whole teaching of Nature is that we should look upwards to ascertain our origin and not downwards to heaven and not to the earth.



TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CHAPTER VIII.—ERRAND BOY.



WITH the kind treatment Tom received at Mr. Wood's, and the blessing of God, he was soon out of bed and able to sit up day after day. He had been provided with a new suit of clothes and a pair of good warm boots, for Mrs. Wood had destroyed his old rags.

One Thursday morning, some weeks after the events of the last chapter, Tom was told to get ready to go with Mr. Wood to Liverpool. They had made known to him their intentions, and he quite approved and was glad. The thought of getting work gave him great joy, especially when he learned that he would be able to see Mr. Wood very often, and be allowed, nay, expected, to come and see them at their home, and let them know how he got on from time to time in his new place. He thought of all the good things he would do when he grew to be a man and had learned a business. Full of gratitude as he then was to Mr. Wood for saving him from death, he could think of little else than earning a lot of money with which to repay that gentleman for what he had done. Next to them he thought of Mrs. Strong and her son George. Full of hope he started for Liverpool. They went to several warehouses and wholesale shops to pay sundry bills and order various goods. In each case Tom, full of wonder, stood by Mr. Wood. He was amazed. Never before had he seen so much business and so much money as he saw that day. More than once he thought himself a young man with a smart collar round his neck, a pen behind his ear, and a lot of money before him to count and put in the drawer.

In the after part of the day they entered a large grocery establishment. After doing a little business with one of the gentlemen in charge of a certain department, Mr. Wood asked if Mr. Trueman could be seen. He replied in the affirmative, and bid them follow him. He led them through the shop, up a flight of stairs, across a small landing, and stopped before a door with glass panels, on one of which there was painted the word "Private." He tapped gently. "Come in," said someone inside the room. They passed in, and the door was closed behind them. After friendly greeting they were told to take seats.

"I have brought the boy I told you about," said Mr. Wood; "is he big enough for you?"

"That is the boy, is it?" asked Mr. Trueman. "How old are you?"

"Nine, sir," said Tom, rather timidly, feeling a little frightened at the apparently harsh tones of Mr. Trueman's voice.

"Nine are you. I suppose you are without father and mother

and have no home. Now if I take you into my employ will you be good and honest?"

"If you please, sir, I mean to be good whether you take me or not," said Tom; "but please do take me."

"Well, we will try you," said the grocer, "though you are both younger and less than we usually have our boys. Sit down a minute or two while I have a talk with Mr. Wood and my manager."

Tom did as he was bid, thankful that at least he was to be tried. During their conversation it was arranged that he should be engaged as errand boy and live on the spot. He was to be tried for a month. If during that time he did his work well and proved himself to be—what they believed he was—a good boy, he should be permanently engaged. "But, remember," said Mr. Trueman, "if you prove to be dishonest, you may find yourself in prison almost before you are aware of it. Attend to your business, be obedient and punctual, and you will get on."

"Thank you, sir," said Tom.

They now left the room and went down stairs again. Mr. Wood took Tom into another little room, and here gave him such further advice as he deemed suitable.

"Be sure you go to Sunday school, and don't get into bad company."

Tom promised obedience.

"That's right," said Mr. Wood, preparing to go. Before leaving he gave him half-a-crown, and told him they would be glad to see him at their house whenever he could come. He was handed over to the manager, led into the warehouse, and set to work.

Those of my young readers who have commenced business can better understand Tom's feelings than we can describe them as he was occupied in that place for the first time that day. The day, like all others, ended, work ceased, and Tom found himself in his new home. Several assistants and apprentices, like Tom, had to live on the spot, and were made as comfortable as it was possible under the circumstances. Formerly Mr. Trueman lived on the premises, but as his business grew and his wealth increased he found it both more congenial and more conducive to health to live in one of the suburbs.

All were strange to Tom. Some of them were such mighty gentlemen (as grocers' and drapers' assistants often are) that he was almost afraid of them at first. Soon after supper he retired to his room. Here he got his Testament, read a chapter, then knelt down and thanked God for taking such care of him. Getting into bed he lay awake for a long time, thinking over the events of the day, and what Mr. Trueman had said about dishonesty and the prison. At length tired nature gave way, and the lad's eyes were locked in sleep and his senses buried in oblivion.

CHAPTER IX.—BEHIND THE COUNTER.

TIME rolled on. It always does. "Time and tide wait for no man." It would be well if we always kept this in mind. Many of us have either forgotten or never learned it. If we felt the importance of time as we ought to do, I am sure we should not trifle with it as some of us now do. Numbers place no value upon it, whilst others use it just as babies do their dolls—to please themselves with. One has said, "Time is the solemn inheritance to which every man is born here." And yet the only use which some make of this inheritance is the *misuse*. It comes and goes, and the only impression they make upon its face is *unimproved*.

It would be tedious were we to enter into all the details of Tom's use of the first two or three years which he spent at Mr. Trueman's establishment. Our readers must, therefore, excuse us if we take the liberty of passing over that period, giving only a general statement.

He attended to his business and was very honest. He had joined a Sunday school, where he was usually found on the Lord's-day, except when he went to visit at Mr. Wood's. He still loved his Testament, and had now procured a Bible, much of which he had read and learned to love. When he had been about three years he was promoted from errand boy to a place behind the counter in the retail shop. He looked upon this as a great step up. When he took his place in the shop on the Monday he felt as proud of his position as if he had been made a king, and had, I have no doubt, far more happiness than has fallen to the lot of many a king. Our great poet says:

"Uneasy lies the head that wears a crown."

The chief event of that week was the coming of Mr. Wood. Tom thought how pleased that gentleman would be to see him behind the counter. Thursday came, and with it Tom's benefactor. When he entered the shop the lad was unusually busy. When Mr. Wood saw Tom with his hair nicely brushed up, a clean collar on, and a white apron in front of him, he felt as pleased as Tom did, and was as proud of him as if he had been his own lad. They exchanged a few words, and before leaving good Mr. Wood said, "God bless you, my lad, and keep you from all harm." As the weeks and months rolled on Tom kept well to his business, and grew in the good opinion of the manager and also of his master.

We have already told our readers that there were several assistants who lived on the premises. Some of these were worthy young men, but one or two were not so good as they might have been. Tom had come to know them all, but yet formed no particular friendship with any of them. At first he was too young to associate much with any of them, only when at home. As long as he was errand-boy he was in *too low a position* for Harry Barker, one of the junior assistants, about three years older than Tom, to take any notice of.

But when he had been in the shop some months Barker began to look upon him, not as errand boy, but as a *respectable assistant*, though still considerably below him in the world. An intimacy sprung up between them which at first was chiefly confined to the shop and the house. They began going out together, and seemed to be growing fast friends. At length they came to be looked upon by all the assistants as companions. They spent most of their spare time together. There was one peculiarity in Tom's companion which he could not quite understand. He could never get Barker cheerfully to go with him on Sundays to God's house. Of course Tom could not think of missing only when he went to visit Mr. Wood. This was a source of great grief to Tom, but he never mentioned the matter to anyone. Barker would go out for walks, or accompany Tom to see his friends—in fact, he would willingly go anywhere except to the house of God, and there he went as seldom as he could. Whenever Tom spoke to him about it he always said he had never been accustomed to go *regularly*, either to church or chapel, and did not now intend to begin. Once or twice he spoke rather lightly about religion and somewhat carelessly about the Bible.

We will not stop to give an analysis of Barker's character, preferring rather to let the reader see him in his actions. We may, however, so far anticipate what follows as to say that it was an unfortunate day for Tom Foster when he made the acquaintance of Harry Barker. If we are charmed and deceived by a serpent, so that we open our bosom to it, we are sure to receive its sting. Reader, look well to your companions!

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONLEY.

VI.—NATURAL PRODUCTS—PRECIOUS STONES. NO. I.

"Blessed of the Lord be His land,
For the precious things of heaven,
For the dew, and for the deep that coucheth beneath,
And for the precious fruits brought forth by the sun,
And for the precious things put forth by the months,
And for the precious things of the ancient mountains,
And for the precious things of the lasting hills,
And for the precious things of the earth and fullness thereof."



HAVING treated upon some of the most familiar of the metals, we will now look at the precious stones. In point of value some of these excel very far any of the precious metals. The names of the commonly received precious stones are as follows:—Diamond, corundum, spinel, chryso-beryl, emerald, topaz, hyacinth, garnet, tourmaline, chrysolite, opal, and chalcedony, with quartz and

amethyst in many varieties. Among these occur the most costly and expensive stones, peculiarly coloured varieties of which also have particular names; as, for example, sapphire, ruby, aquamarine, and the like.

The *diamond* derives its name from the Greeks. Among the ancients it was called *adamas*, which signifies "the invincible;" probably in reference to its hardness. It was so understood by Pliny, who says, "A good diamond braves hammer and anvil." It stands at the head of gems, as surpassing all others in hardness, lustre, and refracting powers. Its peculiar brilliancy, its remarkable refraction of light, and its hardness are well known. The diamond is three-and-a-half times the weight of water; that is to say, if we took two balls of equal size, one of water, the other of diamond, the proportion of their weights would be as one to three and a half. Most diamonds are transparent and colourless, or only just tinted with yellow, green, red, blue, or brown; but they are also met with of deeper colour, and in some cases even with blackish spots and points, or moss-like markings in the interior. The diamond is composed of pure carbon in a crystallised form. Pure carbon is to us what we call an element—that is, it has not hitherto been further decomposed by chemistry. The diamond is not attacked by solvent substances. There was an idea prevalent among the ancients that it would dissolve in blood of a buck; but how such an idea originated it is difficult now to say. In the year 1694, Cosmo III., Grand Duke of Tuscany, caused experiments to be made at Florence, for the purpose of ascertaining the behaviour of the diamond when exposed to a great heat. The diamond was placed in the focus of a burning mirror, and to the astonishment of the operators it gradually disappeared, and at length became totally wasted by the heat, leaving no trace behind.

With regard to the mode of occurrence of the diamond we can say little or nothing, as it has not hitherto been found in its original beds. Its origin and true place in mineralogical geology are not known. It is found in gravels and other shifting beds. There are rich diamond mines in Hindostan. About 1000 labourers are employed in diamond washing in the neighbourhood of Pannah. Diamonds are also found in Borneo. They were first discovered in Brazil by accident in 1728. Diamonds are also stated to be found in the province of Constantine, in Algeria, and one or two have been found in Georgia and North Carolina. The diamonds are obtained by washing the sand which contains them, and picking over the residue. The district is carefully watched, especially in Brazil. The washing is performed by negroes devoted to this service, and was formerly so important that from 1772 to 1775 nearly 5000 men worked at these washings.

The price of diamonds is determined by the purity (water), size, cutting, and colour. The perfectly colourless fetch the highest price. Some diamonds have been sold at almost fabulous prices, and many

of the most celebrated known to exist have changed hands from time to time under strange and romantic circumstances. One of the largest diamonds known is that of the Rajah of Mattun, in Borneo, which weighs nearly two ounces and a half; that of the Sultan of Turkey weighs two ounces; one in the Russian sceptre more than an ounce and a quarter. The greatest diameter of the last is one inch. The Empress Catherine II. purchased it in the year 1772 from Amsterdam, and for it was paid £75,000 and an annuity of £650. A diamond exists in the Australian regalia which weighs one ounce. One of the most perfect is that known as the "Pitt" or "Regency Diamond." It was bought from an Englishman named Pitt during the minority of Louis XIV. as an ornament for the French crown. The sum of £130,000 was given for the treasure, but it has since been valued at half a million. It continued in the possession of Louis XIV. and the succeeding monarchs, by whom it was worn on State occasions. After the Revolution it was still preserved among the State jewels, and the first Napoleon, on his accession to power, used it as an ornament in the hilt of his sword. The sword was found, with other personal effects of the Emperor, on the field of Waterloo by the Prussians after the battle, and was presented to the King of Prussia, in whose possession it has since remained. One of the stones most renowned in the East is the Koh-i-noor, or Mountain of Light. It is said by the Hindoos to have been discovered in the mines of Golconda more than three thousand years ago, and to have been originally in the possession of Kama, King of Anga. Another version states that it was stolen from one of the kings of Golconda by a treacherous general named Mininrola, and presented by him to the Great Mogul, Shah Jehan, the father of Aurungzebe, about the year 1640. It was then rough and uncut, and about twice its present size; but Shah Jehan gave it to a diamond-worker, who cut it so badly that he wasted half of it, and did not display its lustre to good advantage. The Mogul—who was exceedingly indignant—instead of paying the jeweller for his work, fined him ten thousand ducats. About two hundred years ago, Tavernier, the French traveller, saw the Koh-i-noor in India, and described the admiration and amazement it always excited. From that time until it came into the possession of the Khan of Cabul, at the commencement of the present century, the Koh-i-noor changed hands very often. Runjeet Singh obtained it from the Khan in a mean and abominable way. He had heard that the Khan of Cabul had the finest and purest diamond ever seen, and he determined to possess it. The Khan was invited by the intending thief; he arrived at the court of his host with, not the diamond, but a clever imitation. Once in Runjeet Singh's power, that despot immediately demanded the gem. It was reluctantly given up, and sent to the Court jeweller's to be cut. Runjeet Singh soon received intelligence that the stone was comparatively worthless. He was so enraged at this, that he ordered the Khan's palace to be ransacked from top to bottom to find the missing treasure. At

last a slave betrayed his master, and showed the diamond lying under a heap of ashes. Runjeet carried it off in triumph, and subsequently decked himself, and occasionally his horse, with its splendid brilliancy. When he died the gem passed into the hands of his successors; and in 1850, when we conquered the Punjaub, the Koh-i-noor was among the spoil. It was brought to England in the *Meda*, and presented to her Majesty the Queen by the East India Company. The Koh-i-noor was pronounced to be badly cut, and the Court jeweller entrusted it to a firm in Amsterdam to re-cut, a work that occupied the labours of thirty-eight days of twelve hours each. The late Duke of Wellington became an amateur diamond-cutter for this memorable occasion, and gave the first touch to the work. The wonderful stone was exhibited, re-cut, in 1862, and a model of it may be seen in the British Museum. It is valued at more than two millions of pounds sterling. If we took only the common mode of estimating the value, a perfect brilliant weighing half a pound would be worth £20,000,000. Some have stated that such a diamond exists among the royal treasures of Portugal as large as a hen's egg, but according to others this is only a topaz.

OUR SUNDAY-SCHOOL ALBUM.

BY ENOCH GRATTON.

(Continued from page 106.)

XIII.—THE UNCONVERTED TEACHER.



HIS friend has often had his likeness taken, possibly not always with perfect fairness and justice. I hope the portrait contained in this album is no mere caricature, but a fair and faithful picture of the man.

We frankly admit that he has many excellences. He is sober, moderately intelligent, reliable, and punctual. He takes considerable interest in the school, attends the teachers' meeting, and generously supports the funds. Indeed, there are many things in his character and conduct to command esteem and confidence.

But to him may be addressed the word Jesus addressed to that intelligent, upright, anxious young ruler who came to Him, asking this momentous question, "What shall I do to inherit eternal life? Jesus beholding him loved him and said unto him, One thing thou lackest." So our friend has many things, but he has not yet chosen the "one thing needful."

There was a time when the children of the poor had little chance of gaining secular knowledge except what they gained in the Sunday school. That time happily has gone by. Day-schools abound, and

millions of children are now receiving the elements of a sound secular education.

In the Sunday school of the present day all the time and strength we possess are demanded for other and higher instruction. The day-school teachers of our land are doing a noble work, but the Sunday-school teachers have still large fields to cultivate and rich golden sheaves to gather for Christ.

But for the right discharge of this work something more than knowledge and industry are needed. Men need a living and lofty trust in Jesus as *their own* Lord and Redeemer, a personal sorrow for sin, a deep compassion for perishing souls, an abiding baptism of the Holy Ghost, and a vivid sense of the realities of the unseen world.

Now the friend to whose photograph I invite your attention knows little or nothing of all this experience. He may tell his scholars that prayer has power with God, but *he* never tested and proved that power. He may tell them of the joy of sin forgiven, but *he* never felt it. He may try to explain to them the Christians hope, but the explanation is cold and feeble, for that hope never thrilled his *own* heart. He may extol the love of Christ, but it will be like a blind man describing fair colours.

I have had many a talk with this teacher about his strange position. I have told him that he was like a cook preparing food for others while his own soul was starving; like a signboard pointing others to a way along which he himself never walked; like a bell calling others to church, but himself inwardly deaf to the Divine call; like the men who helped Noah to build the ark, but never entered into it themselves; like the keeper of vineyards whose own vineyard is neglected: in that vineyard the noxious weeds of unbelief and impenitence are growing. On the branches of his soul, the sour wild grapes of disobedience and stubbornness are found. No other quality, nor all other qualities combined, can take the place of real vital godliness. We must be born again; we must repent, believe, and obey for ourselves. The resistless power of John's testimony lay in this, that he could say, "That which we have heard, which we have seen with our eyes, which we have looked upon, and our hands have handled of the word of life; for the life was manifested, and we have seen it and bear witness."

The advice I have given to my friend has been not to give up his class, and leave the school, and fold his arms in sloth and sadness, but rather to go at once to Jesus, presenting himself as a living sacrifice; if he never did repent, never did pray and believe and cling to Him, to do so at once.

I would not say go back into the world, but go forward, upward to Christ. If he never was inwardly cleansed and consecrated, he may be. So, dear readers, may you and I, and then there will be no need, there will be no wish, to leave the work. The scholars will no longer hear from our lips a cold, hesitating, and powerless utterance of Christian truth. Our testimony will be like that of the apostles,

"We believe and therefore we speak." We speak, we teach, not because we are expected to teach, or accustomed to teach, not because it is respectable and proper to teach, but because we *believe*. The truth is in us—in the heart, and conscience, and memory—as a solemn burning conviction, as a thrilling and joyful experience, as a central and living force, urging and impelling us to speak to the young about the love of Jesus, the beauty of holiness, and the glory of heaven.

During the last few years we have repeatedly seen and much admired the noble motto of a Sunday-school teacher—"My Class for Jesus." But before this motto can be acted upon with anything like genuine enthusiasm another motto must become ours, namely, "For me to live is Christ."

XIV.—JOHN GOODFELLOW.

THAT is the name of a noble little boy whose portrait I am delighted to have in my album. The clear light of his mind and the generous feelings of his heart shine out in an open winning face, beam brightly and steadily in his clear, bashful eyes. In his play he is cheerful, kindly, and brave. In his tasks at school he is plodding, earnest, and successful. At the examination, when that august and wonderful person, the inspector, comes, he is ready, right with his replies, and I have heard him answer questions which sorely perplexed the brains of scholars nearly twice his size and age. To his teachers he is respectful and obedient. At home I have every reason to believe that he is good-tempered, dutiful, and affectionate. I have had frequent opportunities of meeting him in a Boys' Bible Class, and have been much pleased with his attention to the lessons, his intelligent answers, and his excellent behaviour. He is really a goodfellow. He speaks good words, is impelled by good feelings, is noted for good manners, performs good actions; he has a good name which is rather to be chosen than great riches, and loving favour, rather than silver and gold. I have never seen a dark scowl upon his brow, nor have I seen his eyes flash with foolish and sinful passion; but I have often seen on his brow the clear pure stamp of trust, and in his eyes tears of love and grief while listening to the story of the Redeemer's Cross and anguish. Even a child is known by his doings, and this boy is known to be gentle, generous, and truthful.

Though young, he has learned the luxury of doing good. Wordsworth wrote that "the child is father of the man," and I trust that from this child there will grow and spring a man of fearless purpose, pure affection, and noble endeavour; and that when he dies it may be said of him, "He was a good MAN."

GATHERED LAMBS.

EXTRACT FROM THE REPORT OF THE TULLAMORE (CANADA)
METHODIST S. S., SEPTEMBER, 1876.



IT is our sorrowful duty to record the deaths of six out of eight children belonging to Mr. and Mrs. James Lindsay. They all died of scarlet fever, and so awfully sudden that, from the first that was laid in the grave till the six were side by side, it was less than two weeks. Our comfort is that they are all "Safe in the arms of Jesus."

Dear little Lottie was the first to go. She died June 10th, then followed, in quick succession, John and Minnie on the 12th, Harry and Annie on the 15th and 16th, and Sarah on the 21st.

The deaths of the two eldest are such remarkable examples of the triumph of child faith in a living Redeemer, that they are well worth preserving for the encouragement of parents and teachers in bringing the children to Christ. We refer to them in the order of their age.

Harry, addressing his cousin, Mary A. Lindsay, said: "I am going home to where Lottie, Johnny, and Minnie are." "Well," said his cousin, "you know, Harry, your ma said you must pray to God and ask Him to forgive your sins." "So I do," was the reply, "I pray morning and night, and at noon, too, and every other time in the day when I think about it." Then his cousin asked him, "Harry, who do you love best?" "I love Jesus best of all, there He is now, Mary Ann: will you let me go *now*? Jesus is ready waiting for me." Then turning to his nurse, Mrs. Ford, "Won't you let me go, Mrs. Ford?" "No, Harry, we can't do without you yet a little while." "Well, I'd rather go now, but I suppose I must wait with patience," was his reply. He then sang: "There is a realm where Jesus reigns," "They'll sing their welcome home to me." Near midnight of the night he died, he was heard to cheer three times with boyish glee, and so loud that he was heard out on the street. His mother ran upstairs and asked him what he wanted. With an expression of unutterable delight, he said: "Our side has won, ma! our side has won!" These were his last words. Thank God our side has won, won the race, won the crown, won the inheritance incorruptible, won the company of the redeemed and of angels, won our Father's house where lambs of the upper fold shall ever be led by the Good Shepherd to fountains of living waters and into fields of fadeless green.

Annie's departure was equally triumphant and peaceful, though she was naturally very retiring and gentle. "Tell pa and ma," she said, "and all my friends and cousins to meet me in heaven," and in a few minutes she had the rapturous experience of what she delighted to sing about while on earth, "Sweeping through the gates, washed in the blood of the Lamb."

There the tears and sighs which here were given
 Are changed for gladsome song of heaven ;
 Where the beauteous forms which sing and shine
 Are guarded well by a hand divine ;
 Where the banner of love and friendship's wand
 Are waving above that princely band,
 And the glory of God, like a boundless sea,
 Will cheer that immortal company,
 'Mid the ransom'd throng, 'mid the seas of bliss,
 'Mid the holy city's gorgeousness,
 'Mid the verdant plains, 'mid angelic cheer,
 'Mid the saints that round the throne appear,
 Where the conqueror's song, as it sounds afar,
 Is wafted on the ambrosial air ;
 Through endless years we there shall prove
 The depth of a Saviour's matchless love.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.
JUNE.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
3 Jesus before Pilate [fled]	Matt. xxvii. 11-25.	Isa. liii. 7.
10 Jesus Scourged and Cruci-	Matt. xxvii. 26-44.	2 Cor. v. 21.
17 Death and Burial of Christ	Matt. xxvii. 45-61.	Rom. v. 8.
24 The Conqueror of Death	Matt. xxviii.....	1 Cor. xv. 20.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
3 The Lamentation of Amos	Amos v. 1-15 ...	ver. 14.
10 The Promise of Revival...	Hosea xiv. 1-9...	xiii. 9.
17 The Captivity of Israel...	2 Kings xvii. 1-23	Isa. lix. 2.
24 Review of the Quarter's Lessons		Nah. i. 8.

JULY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
1 The Captive Israelites.....	Exod. i. 1-14.....	Ps. cv. 24.
8 The Deliverer Born.....	Exod. ii. 1-10.....	Heb. xi. 23.
15 Moses' Flight and Exile..	Exod. ii. 11-25....	Heb. xi. 25.
22 God appears to Moses.....	Exod. iii. 1-15....	ver. 6.
29 Moses and Aaron called...	Exod. iv. 1-17....	Jer. i. 8.

AFTERNOON SUBJECTS.			Golden Texts for Repetition.
	SUBJECT.	FOR READING.	
THIRD QUARTER.			
1	Paul in Cyprus.....	Acts xiii. 1—16....	2 Cor. iv. 3.
8	Paul at Antioch.....	Acts xiii. 26—41...	ver. 26.
15	Turning to the Gentiles..	Acts xiii. 42—52....	Matt. xii. 21.
22	Paul at Lystra.....	Acts xiv. 8—26.....	1 Cor. viii. 6.
29	The Yoke broken.....	Acts xv. 22—41....	Gal. v. 1.

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

By way of change, and to lead our young friends to try their hand at composition, we last month asked for short biographies of the three Johns mentioned in the New Testament. We this month ask them to tell us all they can get to know about the Marys of Scripture. In preparing their papers they can simply answer the questions asked below, or they can give the information in the form of a narrative. Perhaps our older nephews and nieces may do the latter, while the younger ones do the former.

WHO WERE THE SEVEN MARYS?

1. *Mary of Egypt* (*Miriam* in Hebrew is the same as *Mary* in Greek).—What were the names of her father and mother? Who were her brothers? Which brother was she set to watch when he was an infant, and where and on what occasion?

2. *Mary of Bethlehem*.—To what tribe and town did she belong? Of what glorious person was she the mother? To what country did she carry her young child? In what place was she invited to a wedding? What miracle did she there witness? Where was she when Christ was crucified?

3. *Mary of Bethany*.—Who were her brother and sister? How did she show her love to Christ? What choice did she make? How did Christ commend her? On what other occasion did she show her love to Him, and how?

4. *Mary of Magdala*.—What miracle did Christ perform on her? How did she show her gratitude and attachment at His death? How at His burial? In what way did Christ distinguish her after His resurrection?

5. *Mary of Galilee*.—Which of the twelve apostles was her son? Which book of the New Testament did he write? Where was she when Jesus was crucified?

6. *Mary of Jerusalem*.—Who was her son? Who came to her house, and from whence did he come? Who had met at the house, and for what purpose?

7. *Mary of Rome*.—Which of the apostles speaks of her as his friend?

ANSWER TO ENIGMA IN APRIL.

1. R-uth, Ruth ii. 22.—2. E-zel, 1 Sam. xx. 19.—3. J-ason, Acts xvii. 5.—4. O-nyx, Ex. xxviii. 20.—5. I-ddo, 2 Chron. ix. 29.—6. C-loak, 2 Tim. iv. 13.—7. E-ldad, Num. xi. 26.—8. I-dumea, Mark iii. 8.—9. N-apkin, Luke xix. 20.—10. T-ile, Ezek. iv. 1.—11. H-emdan, Gen. xxxvi. 26.—12. E-lah, 1 Kings xvi. 13.—13. L-ebbens, Matt. x. 3.—14. O-ak, 1 Chron. x. 12.—15. R-esen, Gen. x. 12.—16. D-iamond, Jer. xvii. 1.—17. A-nna, Luke ii. 36.—18. L-ydda, Acts ix. 32.—19. W-ages of Jacob, Gen. xxxi. 7.—20. Abner, 1 Sam. xiv. 50.—21. Y-ielding, Eccl. x. 4.

"REJOICE IN THE LORD ALWAY." Phil. iv., 4.

HORSFORTH METHODIST NEW CONNEXION BAND OF HOPE.—On Good Friday afternoon the seventh annual festival of the above society was held in the above schoolroom, when a public tea was provided and partaken of by a good number of persons. After tea a public meeting was held, when Mr. C. Horner occupied the chair. The secretary read the report. The number of members on the books are 135, giving an increase of 14 over last year. The number of meetings held during last year are about 24, with an average attendance of 60. The meeting was then addressed by Messrs. Hudson, Hardisty, and Dixon, of Horsforth, and Mr. Craven, of Otley. Recitations and dialogues were given by the Band of Hope members and Mr. Stubbs, of Otley. The meeting was enlivened by singing, and we had altogether a very pleasant evening, and hope that much good will be the result of our Band of Hope.—**WILLIAM SHAW**, Secretary.

ZION CHAPEL, SHERIFF HILL, GATESHEAD.—On Sunday evening, March 18, our juvenile missionary meeting was held. Our esteemed minister, Rev. A. Smith, presided. The children sang suitable hymns, and some repeated portions of poetry. Short addresses were delivered by Messrs. B. Snowdon and A. Stratton. The report was read by the mission secretary, who also read the following list of collectors:—Richard Miller, 5s.; Tom Snowdon, 5s.; Mr. J. Nixon, 4s.; Charles Spedding, 4s.; Matthew Bradshaw, 3s. 6d.; P. Robson, 3s. 1d.; M. J. Stephenson, 2s. 2d.; M. Cook, 2s. 1d.; M. E. Metchison, 1s. 5d.; A. Stratton, 1s.; small sums, 11d. Total from cards, £1 12s. 2d. The chapel was nearly full, and the Rev. A. Smith brought the meeting to a close with an earnest and soul-stirring address on behalf of China, and the feeling was "China for Christ." On the Tuesday following our respected superintendent minister, Rev. B. Chambers, delivered a very eloquent lecture on the Bible. Mr. George Brason presided. Our Foreign Mission collections are £1 1s. in advance of last year.—**A. S.**, Secretary.

UNION STREET SUNDAY SCHOOL, OLDHAM.—*Presentation to a Teacher.*—A few lines in the JUVENILE INSTRUCTOR in respect to the above will gratify the persons concerned therein, and may possibly incite others to

similar deeds. Sunday-school teachers, as other Christian workers, meet with many discouragements, and in their despondent moments are ready to give up. But it often happens that impressions are made, and that gratitude and love are being cherished where least expected, and when the manifestation comes it is well-nigh overpowering. In the month of January last I was made the "confidential" of a few scholars in our school, who wished to give their teacher something that would speak effectually, though modestly, of their love to him. They selected as their gift "The Land and the Book," an inkstand, and a penholder—all beautiful and useful. There was inscribed in the book:—"This volume, 'The Land and the Book,' with an inkstand and a penholder, were presented to Mr. Randle Cocker by the following scholars of his class in the Methodist New Connexion Sunday School, Oldham, as an expression of their love to him, and in grateful recognition of his endeavours to impart to them a knowledge of the sacred Scriptures. John Mills, Samuel Mills, John James Barratt, Herbert Taylor, William Fenton, William Devanport, James Farrar, William Langshaw, and William Glass Taylor. Feb 4th, 1877." Mr. Evan Evans, assistant superintendent, made the presentation, which Mr. Cocker feelingly acknowledged. He said that it was to him "one of the proudest moments of his life."—SAMUEL WALKER.

BRUNSWICK SUNDAY SCHOOL, LONDON.—The Scripture examination in connection with the Sunday School Union took place throughout London on Friday, 23rd February, 1877.

Our Brunswick School (London First Circuit) sent		
16 competitors. Of these 13 passed.		
11 gained First Class Certificates,		
2 gained Second Class Certificates.		
Edwin Frank Shrubsall, 2nd Prize and First Class Certificate	} Senior Division.	
Kate Pike, 3rd Prize and First Class Certificate		
Marion Simpson, 3rd Prize and First Class Certificate		
Alfred Pike, First Class Certificate	} Middle Division.	
William Northmore, " "		
John James Richards, " "		
Mary Ann Richards, " "		
Kate Mackenzie, " "		
Lavinia Simmons, 3rd Prize and First Class Certificate	} Junior Division.	
Mary Jane Thomson, First Class Certificate		
Edward Dine, " "		

The annual meeting of the South London auxiliary of the Sunday School Union was held in Brunswick Chapel on Tuesday, March 27th, when our esteemed superintendent, the Rev. A. Collinson, presided and distributed the prizes.—H.

Memoirs.

—O—

CLARA DAVIES

Was born at Tipton, March 21st, 1861. From a child she was kind in her disposition, gentle in her manners, and always seriously inclined. At the early age of three years she became a scholar in our Sunday school at Dudley Port, and was regular in her attendance until February, 1866. She was then so severely afflicted with small-pox as to be blind for ten days. Blessed with a pious mother, her recovery was made a matter of prayer, and it is believed that in answer to prayer her life was spared at that time. As soon as she was able to speak she said to her mother, "Take me up and rock me and sing 'Rock of Ages.'" After this affliction she was always delicate in her health, and very easily took cold. But when the weather permitted it was her delight to be at the Sabbath school and the house of God. We held revival services at our chapel, Dudley Port, to which services our dear young sister frequently went, and one night in particular, while the Rev. E. Franks, of Wolverhampton, was exhorting all to give their hearts to God, she was deeply impressed. She did not, however, go to the penitent form like some others, but went home and retired to her chamber and there poured out her soul to God in prayer. She then found peace and joy in believing, and from that blessed hour,

"Not a cloud did arise to darken the skies,
Or hide for one moment her Lord from her eyes."

In March she caught a severe cold, and when medical advice was sought, her mother was told that she was in consumption and could not recover. This caused her parents and friends much sorrow, but she was entirely resigned to the will of God. She would often say, "Do not fret, mother dear, it is all for the best. I would rather have it so, for I should not like to be left behind you." Her mother asked whether she had any doubt of her acceptance with God. She said, "No, mother, why should I have? Jesus has done all for me? Why should I doubt?" Her mother took her into the country, and for the first week she seemed much better, but before a fortnight had passed she became so ill as to require immediate removal home. When at home again she was very glad. She said, "I did long to see your dear faces, for there is no place like home." When so much worse as to be obliged to take to her bed, she still had unwavering confidence in Jesus. She was visited by her superintendent and other friends. On one occasion while Mr. T. George was talking to her, she seemed to drink in every word that he said. On the following morning she said, "Was it not encouraging last night? Mother, I did feel so blessed while Mr. George was talking to me." A young friend who visited her said, "Oh, Clara, I am so sorry to see you lying there." She looked at her with a smile and replied, "Do not think that I am unhappy if I am lying here. I can say for me to live is Christ, but to die would be gain." Towards the close of her life she suffered greatly, yet never murmured. Often she exclaimed, "What could I do without Jesus! He does help me."

"Though painful at present it will cease before long,
And then, oh, how pleasant the conqueror's song!"

At times she talked of death as though she was going to take a journey of pleasure, and would mention the names of relatives she would see who had died happy in the Lord. "Above all," she would say, "I shall see Jesus." One day when in much pain, her mother said, "My dear, your sufferings are great." "Yes, mother, but what is it all to what Jesus suffered for me." On the Saturday night before her death her father and brothers going to her for their good-night kiss, she put her arms around the neck of each one, and requested them to meet her in heaven. Her mother, kissing her face, said, "Oh, this poor face how cold it is!" She replied, "Well, what does it matter, it will not be for long; it will soon be over. I shall soon be safe in the arms of Jesus, safe on His gentle breast." And then she said, "Oh, I am so happy, so happy." After this she had not the power to speak, only in broken sentences scarcely to be understood. She was, however, conscious to the last. For some time she had not been able to move her left hand. A few minutes before she died, her mother, bending over her, whispered in her ear "Jesus," to which she moved her head, and with something like supernatural strength waved her left hand above her head three times as a token of victory. Thus our young friend passed away on Sunday morning, September 10, 1876, aged fifteen years and a half, leaving a blessed testimony behind her that she has gone to be with Jesus.

HENRY ROBINSON

WAS the second son of Wm. and Hannah Robinson. He was born July 10th, 1862, near Ripon. As a child he was blessed with an amiable disposition and pleasing manners. These endeared him to his parents, and made him a favourite in the circle of his friends. He was led by his parents to the house of God. While there he was quiet and attentive, as some thought beyond what might be expected from one so young. He connected himself with our Sunday school at South Stockton when worshipping in the Temperance Hall. Here he was respectful to his teachers, and attentive to their instructions. His progress in learning was highly satisfactory, and the blessed truths he heard respecting the mercy and love of God had a sweet and powerful influence on his mind.

We do not wish to intimate that Henry was without faults or failings, but they were not very prominent in his conduct, nor were they very numerous; yet they were sufficient under the teachings of the Holy Spirit to show him that he needed a Saviour; and such a Saviour he found in the Lord Jesus Christ.

But one who was bidding fair to be a loving disciple of Jesus, a labourer in the Church, and an ornament to his family was destined not to remain long on earth. The cherished hopes of his parents were doomed to disappointment.

"Their own sweet child,
Gem of their hearth, their household pride,"

was "carried as with a flood," so early, so suddenly, he "By the roadside fell, and perished on the threshold march of life." But—

"Oh, weep not, though the beautiful decay,
Secure beneath the earth the snow-drop lies,
Waiting the springs young resurrection morn."

The death of our dear young friend was indeed sudden and unexpected, and no event could have occurred to illustrate more strikingly the

warning "Boast not thyself of to-morrow." Scarcely had the echoes of his morning prayer died away, than the messenger came. Leaving home at six o'clock in the morning, to labour for the bread which perisheth, full of life and vigour, by seven o'clock he was no more. On the 14th of August, 1876, in the fifteenth year of his age, the summons came, and his joyful spirit winged its flight to the paradise of God, to feast for ever "upon the tree of life."

His mortal remains were interred in the cemetery by the superintendent of the school, whither he was followed by members, teachers, scholars, and friends.

"Death cannot come to him untimely who is fit to die;
The less of this cold world the more of heaven;
The briefer life, the longer immortality,"

Pious teachers here see that some fruit of their toil is safely gathered home, and find an inducement to renewed labour in this holy sphere. His death was improved by the writer in Ebenezer Chapel, South Stockton, to a large and weeping congregation. We hope this visitation will prove a blessing to the friends he has left behind, and that they will prepare to meet him in the skies.

J. STARK.

MARY MANSELL.

MARY MANSELL, the eldest daughter of John and Sarah Mansell, of Copethorne, Cheshire, was born on the 18th December, 1865, and crossed the River on the 28th January, 1877.

Like Timothy, early in life she was taught to read the Holy Scriptures and love the Bible above all other books. She walked in the procession when the foundation-stone was laid of Hawthorn Street Chapel, Wilmslow, and remained a scholar in the school. Every Christmas Day she took a very active part in the recitations and singing.

Her illness was short, but very severe. Mr. Births went to see her, and asked if she would not like to go to heaven. She paused—in her usual way, as she was always very cautious in giving answer quickly—at last she said, "I do not know." A little while after he was gone she said to her grandmother, "I should like to live a little longer, and then go to heaven; but, grandmother, I am not afraid to die; Jesus is with me. They will so miss me in my Sunday-school class; but give my love to the scholars and my dear teacher, and tell her I am going to be for ever with the Lord."

As several portions of Scripture were read to her, among which were the tenth and fourteenth chapters of St. John's Gospel, her lips would be moving in prayer.

In the midst of her sufferings she was calm and patient, but on one occasion she did say, "Oh, it is hard work!"

Some of her favourite hymns were "Safe in the arms of Jesus," "Sweet hour of prayer," "Lead me to Jesus," and others.

When near her end her grandmother asked her if she felt Jesus precious. She smiled, and answered "Yea." Just at the end of her journey, with a sweet but feeble voice, she said, "I am coming, mother," "I am coming, mother," "I am coming, mother," and very soon after passed away.

Her mother had died six years ago, and Mary, with her little sister, were taken to the house of prayer by their grandfather and grandmother. She hoped her father, her relatives, and friends and scholars would meet her again in heaven, where partings are no more.

AN INDUSTRIOUS GIRL.

IN Liverpool certificates and prizes are given to children of the board schools for regular attendance. Among the girls in one school to whom a certificate was awarded was one especially deserving of notice. We introduce her to the acquaintance of our readers that they may be stimulated to imitate such an excellent example. The name of this girl is Elizabeth Ann Cross, and she is thirteen years of age. She lived a distance of three miles from the school, and during the year attended every time the school was open, making in all 455 attendances. This necessitated her walking during the year no less a distance than 1322 miles. A perseverance like this is deserving all praise, and the reward she obtained from the Council of Education, everyone will admit, was well-merited.

Poetry.

BE CAREFUL WHAT YOU SAY!

In speaking of a person's faults,
Pray don't forget your own;
Remember those with homes of glass
Should seldom throw a stone;
If we have nothing else to do
Than talk of those who sin,
'Tis better to commence at home,
And from that point begin.

We have no right to judge a man
Until he's fairly tried;
Should we not like his company
We know the world is wide.
Some may have faults—and who has not!
The old as well as young;
Perhaps we may, for aught we know,
Have fifty to their one.

I'll tell you of a better plan,
And find it works full well;
To try my own defects to cure
Ere others' faults I tell;
And though I hope some time to be
No worse than some I know,
My own shortcomings bid me let
The faults of others go.

Then let us all when we begin
To slander friend or foe,
Think of the harm one word may do
To those we little know.
Remember—curses sometimes, like
Our chickens, "roost at home;"
Don't speak of others' faults until
We have none of our own.



MAKING A GARLAND.

MAKING A GARLAND.



OUR childhood was spent in the country, and such is our remembrance of the pleasure we then felt in rambling through the fields and gathering flowers, that we are almost sorry for boys and girls who can never wander beyond the precincts of a town. How happy the little group of children look in the picture we give this month! There they are in the pleasant sunshine, breathing the fresh, sweet air, and stringing together the buttercups and daisies they have gathered in such profusion. Their hearts are full of innocent joy, though perhaps they never think how happy they are. It is an unconscious blessedness they revel in, but it makes them think the earth is a paradise, and no doubt they would like to live in it for ever. This is the experience we all pass through if our infancy and childhood are what our kind Creator meant them to be. Like our first parents we start life in a garden, though, like them, we are sure in the end to get into the wilderness. But we do not care so much about telling children this, they will learn the truth soon enough without grown-up people helping them to anticipate it. We like to see young children happy, and with us it is a religious duty to make them happy, not in a sensational, but a simple, natural way. We think it the best way to make children good—that is, when it is accompanied with proper teaching and discipline. We hope all our grown-up readers are of the same opinion as ourselves on this subject. Then, if we cannot take our little ones into the fields that there they may pluck flowers and make garlands of them, we can do our best to make home a garden where sweet-scented flowers grow, and delicious fruit is found, and birds delightfully sing.

 BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of* "A Year at School," &c., &c.

Letter No. 36.

FROM BEN BARLOW to DR. BARLOW.

Worcester, June 21st, 187—.

MY DEAR FATHER,—

Please excuse this paper. I have torn it out of an old copy-book.

I had packed all my paper at the bottom of my trunk when Ted Instone suggested that I should have about time to send a letter by the post. We packed his things half-an-hour ago. He is now sitting on the top of my box to keep the lid down while I write this. If the lid once gets up, it will take a long while to get it down again, for we had to empty the trunk three times before we could arrange the things sufficiently close to allow of the lid closing at all.

I write just to say that I shall be at Hammerthorpe Station at about half-past ten to-morrow morning. If you can spare the horse, please let Bob meet me there with the gig for my luggage.

Mother will be pleased to know that I have done well in the examination. I am third in my class and Ted Instone is second. We shall be moved into the third class next half, and I shall then have a chance of being captain of the cricketing eleven if I play well enough.

Ted says he feels as if he were getting lighter, and the box lid is beginning to rise, so I must go and help him to hold it down.
—Your affectionate son, BEN.

Letter No. 31.

From BEN BARLOW to TED INSTONE.

The Laurels, Woodbourne,
June 23rd, 187—.

MY DEAR TED,—

I got to Hammerthorpe at half-past ten to the minute, and found Bob waiting for me with the horse and gig. Bob got my things in, and I drove home. Didn't I just make the cob go! The folks ran out of the houses to see what was the matter, and there was such a barking of dogs and quacking of ducks as you never heard. One old gander on the common narrowly escaped being the victim of his own fury, the wheel only just missed him as he angrily hissed at us for disturbing his flock of geese.

I reached home in about half-an-hour and found them all anxious to see me. Our dog Carlo was as if he had gone mad. He flew at my throat, and pawed my hands, tore off down the garden and drove Topsy the cat up into an apple-tree, came back again into the house, and barked at me as if I had been a burglar, and, finally, ran off to the paddock below the house and chased imaginary rabbits in the hedgerow till he was tired.

Mother is very pleased I have done so well at school. It seems the doctor's reports were sent out on the 21st. Father says he is very well satisfied with mine. I was afraid Dr. Tasker would be down on me very hard about that fight.

I went to my old school for an hour this morning. They were busy getting ready for their examination, but for all that Mr. Jones gave them an extra half-hour's play in my honour. The old fellows were so glad to see me. I told them you were coming, and they want

to know all about you. I tell them to wait and see for themselves. One or two are under the impression that you must be a bit priggish and stuck up because you are a Londoner, but, I am sure they will alter their opinion before you go back.

I find my rabbits have been increasing so fast that I shall have to sell off, or there will not be room enough for them. Bob never sent me word how many there were; he wanted to keep it as a surprise. You would hardly believe what a good fellow he is to animals. If need be I feel sure he would go without a meal now and then to give them one.

I hope you found all your people well. I will let you know what train I shall come by as soon as I can get father to look it out.

Father and mother join me in kind regards.—I am, yours truly,
BEN BARLOW.

Letter No. 32.

From TED INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park,
London, June 24th, 187—.

MY DEAR BEN,—

Thanks for your long letter. I was much amused to hear of your noisy progress from Hammerthorpe to Woodbourne. It brought to my mind the adventures of two very celebrated horsemen. First, I thought of you as Dick Turpin, with a Bow-street runner in the shape of an infuriated gander making a dash at Black Bess's bridle. And then it occurred to me you were more like John Gilpin. You might describe the sensation you caused by slightly altering Cowper's lines:—

"The dogs did bark, the children screamed,
Up flew the windows all;
And every soul cried out, 'What's that?'
As loud as he could bawl."

I hope your dog Carlo will be tamed down a bit by the time I pay you a visit. If he shows his affection to his young master by flying at his throat, what may a stranger expect? If he has not got rid of his pranks, I shall have to get your father to give him a dose of strychnine for fear of our getting hydrophobia.

I am glad your rabbits have been so profitable. Shall you take your surplus stock to market to sell? I should like the fun of selling them in Hammerthorpe market-hall.

I got to Euston Station about five o'clock, thoroughly tired out. As my father does not keep a horse I had to engage a cab—the most stuffy and miserable of conveyances. There you are in the back of the vehicle with nothing to see but the horse's hind-quarters, and cab-horses are not the most symmetrical quadrupeds to gaze on—a little more muscle and a little less bone would improve their appearance.

I had far sooner ride on the knife-board of an omnibus than in a cab, but, you see, omuibuses won't take luggage.

I found father and mother very well, and also brother John. My eldest brother—the married one—I have not seen yet; he is coming up to-night. Poor little Ernie is not much better, though he was able to go out in a Bath-chair in the park last week.

I don't think Dr. Tasker's report is very greatly to my credit. Father says he fears I am not getting on as well as I might. I suppose I am not. You see I was in the fourth class twelvemonths before you came. But I am not going to spoil the glorious holidays by crying over spilled milk. When I get back to school again I must try and do better.

Remember me kindly to your father and mother, and to your old schoolfellows, although they entertain such uncomplimentary opinions of me.—Believe me, my dear Ben, yours expectantly,

TED INSTONE.

Letter No. 33.

From BEN BARLOW to TED INSTONE.

Woodbourne,
June 26th, 187—.

MY DEAR TED,—

A line to say I shall leave Hammerthorpe to-morrow by the mid-day express, which is timed to reach Willesden at a quarter past four. I rely on your meeting me there. Don't fail, or you will incur the deep displeasure of, yours in great haste, BEN BARLOW.

Letter No. 34.

From BEN BARLOW to DR. BARLOW.

3, Brighton Villas, Regent's Park,
London, June 28th, 187—.

MY DEAR FATHER,—

I got here all right by five o'clock last night. Ted met me as promised at Willesden. It was well he did. I never saw such a station in my life. I should think there are a dozen platforms, and forty or fifty staircases to the top level, and everyone looks precisely like the other.

I should have written last night as I intended, but I left it until after tea, and, to my surprise, Ted told me I was too late for the post. It seems you have to post before six o'clock if the letters are to be delivered next morning. It is queer that we can post at Woodbourne up to eight, and at Hammerthorpe up to ten o'clock, while they cannot post after six in London. I always thought London had the greatest advantages in post-office work, and indeed in everything else.

I have been made very welcome here. Mr. Instone is a solicitor, and has offices somewhere near Lincoln's Inn. He is a very agreeable gentleman and a clever musician. That accounts for Ted's fondness for music, I expect. Mrs. Instone is a very nice lady, and looks younger than her husband. She is very fond and proud of her sons. The eldest son is married. The second son, John, is about twenty; he holds a situation at Somerset House. He is a jolly fellow, lively like Ted, taller, and quite like a man. Then there is Ernie, a boy of about twelve. His spine was hurt when he was a baby, and he has never been able to walk all his life. He has light wavy hair, big pale blue eyes, and such a winning look. Though so afflicted he never gets fretful, but is grateful for the smallest service.

He has all sorts of toys and lots of books, and lies on a sort of perambulator, which can be wheeled when he likes through the French windows on to a narrow strip of lawn, which lies at the back of the house. When he goes to bed they take the wheels off the perambulator and carry him upstairs so. When he is well enough to go out, they engage a Bath-chair for him. I feel so sorry for poor little Ernie. It seems such a sad thing not to be able to run and jump and skip about.

Mr. Instone's house is one of four standing together. It is built of white stone, and looks very big and grand in the front. There are many rooms and some large ones, but instead of a big garden at the back, they have only a strip of turf about as big as our parsnip bed, and that is enclosed with high whitewashed walls.

The view from the house is very nice. Right across the way is Regent's Park, and from the bedroom Ted and I sleep in we can see the roofs of the animals' houses in the Zoological Gardens. I should not like to be so close if ever the animals should happen to break loose. Ted says there was a narrow escape of that some years ago. A boat with a cargo of gunpowder exploded on the canal just below the gardens, and blew up some of the cages. Happily the keepers were in time to secure the animals.

We went for a walk in the park early this morning, and after breakfast Ted and John and I had an omnibus ride through some of the main streets. We saw scores of famous buildings. Among others, Temple Bar, which was propped up with timber, London Bridge, the Bank of England, the Royal Exchange, the Mansion House, and St. Paul's Cathedral swelling above them all.

As soon as I have finished this letter Ted and I are going to the gardens to see the animals. We shall spend the whole afternoon there, and try and see all that is to be seen.

Mr. and Mrs. Instone and Ted send their regards to you all. Give mother and sisters my best love, and accept the same yourself from your affectionate son,

BEN.

Letter No. 35.

FROM DR. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne,
June 30th, 187—.

MY DEAR SON,—

We are very much pleased to hear you are so much enjoying your trip to London. I hope Master Instone may be equally delighted with his promised stay here. Mind and not do too much. You can only enjoy a certain amount of sight-seeing in a given time. If you do more, it becomes a vexation and a weariness.

Your sisters are wishing they could have been with you at the Zoological Gardens to see the monkeys' antics and all the rest of it. Your mother hopes you get into no mischief there. She is a little afraid of your venturesomeness, and hopes you did not get too near the lions and tigers.

Your mother and sisters join me in love to you and in regards to your kind entertainers.—I am, your affectionate father,

OLIVER BARLOW.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XVII.—THE BEAVER.



ALL the animals that excite human admiration by their sagacity, and their constructive and architectural skill, there is, perhaps, none that surpasses the beaver. A more scientific observation of its habits and modes of life has exploded many of the fabulous stories that used to be commonly reported of this remarkable creature.

But enough of the marvellous remains, and remains with the advantage of being now attested as indisputable fact, to make it worthy our attention, and to form another striking illustration of that infinite goodness and wisdom that shine with such splendour in almost every object and law in Nature.

The beaver flourishes in northern countries alone, and is most common in North America. Its skin, which contains a soft and highly prized fur, used to be a very important article of commerce. But the trappers of North America destroyed beavers in such enormous numbers that the animal is now much less common than it was. During the latter part of the eighteenth and the beginning of the nineteenth century as many as 200,000 skins were exported to Europe annually. In the year 1808, 126,000 were exported from Quebec alone. The fur was very extensively used for the manufacture of hats; but the

supply could not be sustained, and a silk plush came to be substituted in its stead. The improvements that took place in the manufacture of silk hats about 1840 caused the fur of the beaver to be almost entirely superseded for this purpose. It is, however, still extensively used to trim and adorn ladies' mantles and dresses. The fur on the animal is always the thickest in winter. Nature does for the beaver exactly what we have sense to do for ourselves when we put on a thick overcoat to protect us from the cold. The beaver hunters accordingly seek to capture their prey in the winter, for the skin is then in the best condition. Over and above the fur which grows close to the body, there is a kind of long hair which seems designed to protect the fur from injury, and which is carefully stripped off, and used in the manufacture of various stuffs.

The beaver is an amphibious animal, and can make himself at home on either land or water, though he requires to be very near to both to be perfectly happy. His head and forefeet are something like a magnified rat or squirrel, but his hinder parts are expressly designed for aquatic pursuits. The hinder feet are webbed, and the tail is like an oval paddle, which, as we shall see, can be put to a variety of uses.

The most remarkable thing about the beaver is the care he takes to build his house, and the methodical and businesslike way in which he goes about it. The site generally selected is a pond, or failing that, a small stream or river. When finished the house has the appearance of a large mound resting on the water. The front door is under the water, and so is the way to the various rooms, which are not unfrequently built two and sometimes even three stories high. When comfortably housed, therefore, the animals are quite safe from their natural enemies the wolves, who often pursue them to the very water's edge.

If a stream is their only possible site, the animals first of all build a dam or breakwater right across it, below where their dwellings are to be. Civil engineers have lately ascertained that the strongest breakwaters are those built with a slight curve to turn the force of the waves, and many sea-walls and other similar constructions are now built in that form. Now this is exactly the kind of wall that beavers have been building for thousands of years.

But to build a substantial dam that will not be broken by the shock of the water is no easy matter, as many of our youthful readers will have discovered when carrying on their early efforts in engineering by the seaside, or near some inland river. How does the beaver accomplish his task? He makes a wise use of the implements with which Nature has endowed him—his teeth, his paws, and his tail; and the animals who constitute a single colony always act in unison and under the recognised leadership of one of their number. Their teeth are sharp, and are deeply riveted in the jaws, and are so strong that they can gnaw down large trees, and, as an ordinary thing, make their way through a trunk four inches in diameter almost as quickly as a

man could with an axe. The stems and branches of trees are either drawn to the necessary spot on the tails of the animals, or they are floated down the stream to the place where they are wanted. The tail is used not only as a hod for the animal to carry his materials upon, but is sometimes made to serve the purpose of a trowel. The paws are used to work and soften the clay. They use sticks, stones, branches, roots, moss, grasses, clay—it is all fish that comes to their net—they can use up almost anything they come across. With these materials they construct their causeway as skilfully as any human architect. The willows, poplars, &c., which they use sometimes strike root in the mud or clay, and have been known to grow in time to a green hedge in which birds have built their nests. When the dam has been raised to its proper height, the chambers for the animals to live in are rapidly finished. These mounds, however, are of such strength, and built on such true principles, that though put together by small creatures of two or three feet in length, a strong man can jump on them without any fear of their giving way.

The food of the beaver consists of the bark of trees and such shrubs and flowers as grow on the water or near it. They are confined, therefore, by a double necessity, to districts that are well watered and well wooded. During the summer they gather together a store of food for the winter, for experience, or instinct, has taught them that then it is very scarce, and if their magazines are not well filled they will have to subsist on "short commons." This food is stored beneath the water, and at such a depth that it can never be locked in by the ice. Fresh cut bark, however, is as dainty to them as fresh meat to sailors who have for months lived on salt junk, and it is with this the hunters bait their most successful traps.

Besides giving us a beautiful covering for our persons, the beaver presents to every reflecting mind some valuable lessons on industry, thrift, and concord. A colony of beavers seems to form a sort of academy of architects and engineers, who proceed on well-shaped and rational plans, which they are able to modify if the necessity should arise.

When we see the extent and solidity of their work, and its almost perfect resemblance with works erected by man for the same purposes; when we see them raise an embankment, and make even sluices if the occasion for them should arise; when we see them build their houses and plaster them much the same as we do our apartments; when we see them contrive various modes of exit and of entrance; when we see them carefully store up a supply of food for a day of need; when we see them form themselves into an organised society with hardly ever a single traitor to the good of the commonwealth, and, therefore, no reasons for prisons or the police in their little economy, every reflecting mind must acknowledge the wisdom and adore the goodness of the great Creator who hath made everything beautiful in His season.

TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CHAPTER X.—THE THEATRE.

MY son, if sinners entice thee, consent thou not," is excellent advice, which all our readers will do well to follow. Solomon who gave it had a large experience of life. He knew far more of men and things than some of us possibly can, though we live in the nineteenth century. His experience taught him that sinners do entice, and he shows his wisdom in advising us not to consent. If you will follow his advice it will save you from many a pang, much disgrace, and the misery into which so many thousands have fallen.

But we return to our story. One evening when business was over, Barker and Foster went out for a walk. When they had gone some distance Barker said, "Foster, I think I shall go to the theatre to-night. 'The Poor of Liverpool' is to be played, and I should very much like to see it. You will go with me, I suppose?" "To the theatre!" said Foster, evidently astonished at such a proposal. "Yes," replied the other; "I am sure you would enjoy it, there is such a good company here at present. I mean to see this wonderful play."

"But I think it wrong to go to such a place," said Tom; "and I am very sorry that you think of going."

"Well, as to its being wrong," said Barker, "I don't see that. I can hardly think that you are right in calling it wrong. Remember that people who are very respectable go there. Sometimes even ministers can be seen there. And I am sure you will not believe that ministers would go if it were wrong."

This was a powerful argument against Tom. He could not think that ministers would go if there were anything wrong going on there. He forgot, or rather he had never learned, that even good men sometimes make mistakes. Barker, who saw that he was winning, followed up his argument with such others as those can, and only those would, who try to make a wrong thing look right, if it answers their purpose and serves their end.

"But," said Foster, "I am afraid that Mr. Trueman would be very angry if he knew we had been to such a place as that."

"Well, as to that," said Barker, "you need have no fears. No one will know us there. And even if they did there is no fear that they would ever think of telling Mr. Trueman. But suppose they should go sneaking to tell him, what of that? We have done our day's work, and are now out for our own pleasure. I did not know that we were at all bound to ask him where we should go. I have never done so yet, and another thing, I don't intend. Come along, man, don't be a

baby all your life." After saying this, he put his arm through Foster's and led him along. Foster was still hesitating, and said :

"Suppose we were to go, what time should we get home?"

"About eleven o'clock or soon after," said Barker.

"Eleven o'clock!" said Tom; "you know I never stop out after ten o'clock. I have never been out so late as that since I came to live at Mr. Trueman's."

"That is no reason why you never should be," said Barker.

"But if we were out so late we should be sure to be found out," said Foster. "You know the housekeeper will not go to bed until we get home and have had supper. She would be sure to ask where we have been stopping so late, and you know I cannot tell a lie about it. Then Mr. Trueman will get the news first thing. Of course, as you say, it may not be wrong, but if I go to the theatre, I had much rather Mr. Trueman did not know I had been."

Barker saw that he had now got him. It was very easy for him to remove the last difficulty, which he now did by saying :

"You have no occasion to fear anything from Mary; I have made it all right with her long ago. The first time I was out late, like you, I was afraid she would tell, so I bought her a brooch, and that set all things right. I have been out many times since then, but she never tells. As I thought of going to see this play, I knew I should be late, and as I expected you would go with me, I told her that Foster, and I would be rather late, as we were going to the theatre. She laughed, and wished she had the chance to go."

By this time they were at the door of the theatre, and almost before Tom knew it he had passed for the first time in his life across the threshold of a common theatre, and had taken his first step to ruin. It is impossible to describe Tom's feelings as he sat there, thinking that everybody was gazing at him. Let us say that he was very uneasy. Indeed, he was ashamed, confused, and restless. He looked toward the door, and was more than half inclined to walk to it and pass out, when the spell was broken by the tinkling of a bell and the rising of a curtain. The play went on from scene to scene and act to act. In spite of himself, Foster was interested somewhat. Barker saw this and tried to keep up the interest, in the few short intervals, by assuring him that what was to follow was better still, and the fire scene best of all.

The play ended, the youths went home and soon retired. Barker was glad that he had gained a point with Foster, and slept well. But Foster, when alone in his room, was very much troubled. Now he felt what he had done. He would have given anything to have undone that night's work, but that could not be. With a heavy heart he got into bed, and laid his head upon the pillow, which, though soft enough before, now felt a good deal harder than the stone he placed his head upon in the horse-box some years before.

CHAPTER XI.—AN UNEXPECTED DISCOVERY.

NEXT day Barker took care to let some of the assistants know that young Foster and he had been to the theatre. He had reasons, best known to himself, for doing this, but they were no doubt of a questionable character. Foster did not like this, but as the assistants seemed to look upon it as a privilege, he began to think that after all he had done nothing wrong.

The two youths became more attached to each other. Barker seemed to be such a good fellow, that Foster began to think himself fortunate in having his friendship. Besides, he was very liberal. Foster had very little money. Barker had plenty, and was always ready to treat his companion to anything he like to have.

Had Foster been wise enough to think about Barker's position, and reckon up his income from all lawful sources, he would have been not a little uneasy about the amount of money which he had at his disposal. It never occurred to him at this time that anything was wrong. He was like the victim of the rattlesnake charmed by its music, but unconscious of its sting, until he felt its poison in his blood, and smarted from the pain.

Again we crowd a few years of Foster's history into a few sentences. He attended to his business, and so far had the esteem and confidence of his master. But he had left Sunday school, seldom went to a place of worship, neglected his Testament, and had become very irregular in his visits to Mr. Wood's. These good people were glad to see him looking so gentlemanly as he always did, but were afraid that he was growing rather careless. Whenever they spoke seriously to him, he always assured them that he was all right. Through these years Barker was his constant companion. They had both learned to smoke, to drink, and to gamble a little. But so far they had kept within what they were pleased to call reasonable bounds, and were not in the least suspected of irregular conduct by their master.

Foster is now a young man about twenty years of age. A few days after his twentieth birthday he was taken from behind the counter to a place in the office. In his promotion to this position he was lifted over one or two others. It was evident that he had won the confidence of his employer, and had a fair prospect of making for himself a good place in the firm of Mr. Trueman. When a few weeks had passed, he was master of the difficulties of his new position, and liked the work well. About this time Mr. Trueman made a discovery which was of no small importance, and not a little damaged the character of Foster in the eye of his master.

Having business of importance which required his absence from home for a few weeks, Mr. Trueman was very busy for some days previous to his departure. The night before he went away he was at his office until a very late hour. He and the manager were in the private office until past midnight, but their presence on the premises was not known to those in the house. Leaving the office between

twelve and one, they passed on together towards Mr. Trueman's home. It was a dark, wet night. They had not proceeded very far before they heard persons approaching who had evidently had more drink than was good for them. Mr. Trueman and his manager stepped from the footpath, that the inebriates might have it to themselves. As a general rule, the widest footpath is narrow enough for a drunken man. A few paces farther on they passed a large gas-lamp, the light from which fell right into the faces of two young gentlemen who passed at the same moment. Arm in arm they struggled on, talking as only mad men or drunken men would talk in the streets any hour of the day, not to say anything about the night. For a few seconds Mr. Trueman and his manager stood speechless, gazing after the young men who had just passed. They could scarcely believe their own eyes, but were compelled to do so.

"Let us follow them," said Mr. Trueman. With strange feelings the master and manager walked after the youths, who continued their talk, little dreaming that two sober men were behind them taking notice of all they said.

"If that horse wins I shall be struck into a nice bit of ready cash," said one of them, "and we will drink the governor's health in a bottle of champagne." After a loud laugh, the other said: "But if it loses, your quarter's salary will go all at once."

"I'm not afraid of that," said the first speaker; "I know which horses are safe, and which to make my bets on. I wish you had put a sovereign on it too."

The two young men stopped before the premises of Mr. Trueman and entered the house. If before they had had any doubt who these young gentlemen were, now there could be none. Having seen them inside and the door closed behind them, the master and manager turned away with emotions we cannot describe. They had learned three things. First, that Barker and Foster were drinkers; second, that Barker at least was a gambler; third, that at that moment Barker had a bet on, by which he would win or lose an amount equal to his quarter's salary.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

VII.—NATURAL PRODUCTS.—PRECIOUS STONES. NO. II.



WE shall proceed now with a description of a series of precious stones which are grouped by mineralogists under the well-known term quartz—a mineral whose constituent ingredient is siliceous or flint. Quartz is very widely distributed throughout nature, and enters largely into the composition of some of the oldest rocks, as granite for example. Under the name of rock-crystal it is met

with in forms and hues of great beauty. In its massive state it occurs in cavities and vein-like spaces, principally in the primitive or old rocks. These are called in Switzerland caves or chambers, and often contain an abundance of such crystals, which sometimes occur perfectly pure, weighing several hundredweight. Tyrol, Salzburg, Dauphiny, Hungaria, Siberia, and Madagascar furnish very beautiful rock-crystals, which in many cases are coloured light pinkish-brown. These are called *smoked topazes*. Others are coloured yellowish, and are then called *citrines*.

The *cairngorum* stone of the Scotch highlands is a brown or yellow rock-crystal. In former times vases and bottles, and the like, were worked out of rock or crystal, and the largest of these are now in the treasury of Vienna. But the variety of rock-crystal most highly prized is that coloured violet, known as *amethyst*. It is as hard as the ruby and the sapphire, and susceptible of a rich and brilliant polish. Yet in spite of its beauty it is tolerably cheap. Schemnitz in Hungary, Wiesenbach and Wolkenstein in Saxony, Mursinok in Siberia, Oberstein in Zweibrücken, Ceylon, &c., furnish amethysts. The stone was supposed by the ancients to have a virtue against drunkenness, and its name refers to this. Amethyst is mentioned in connection with the breastplate worn by the high priest, and with the foundations of the "holy city" (Rev. xxi., 20).

Silica, or pure flint, when combined with a compound of oxygen, known as oxide, and silicate of iron, furnishes the *jasper*. Jasper is found in every quarter of the world. The best kind for ornaments comes from Siberia. There are fine quarries of it in Spain. In colour it varies from dark dull red to several varieties of yellow. When the lumps in which it is found are marked by bands, it is called *riband jasper*. It is mostly opaque, that is, not transparent, and is thereby distinguished from *chalcedonies* which are transparent. Jasper is particularly esteemed for making seals. It was among the gems worn by Tyrus (Ezek. xxviii., 13). The throned one in Rev. iv., 3, was "to look upon like unto a jasper." It is thrice mentioned in the description given of New Jerusalem in Rev. xxi.

Silica occurs, moreover, in nature in an uncrystallised condition, although not so abundantly as crystallised, and it is frequently mixed with the latter, forming in this condition beautiful gems which cannot be made artificially. Among these are the *opal*, *chalcedony*, and *agate*. These were highly prized by the ancients, and, indeed, were celebrated in several poems by *Orpheus*, who could not say enough of their virtues—how they made men agreeable to women, how they cured the sting of scorpions, and how they were good and pleasant to drink with good wine. The opal is of a milky hue, and remarkable for its changing colours. The principal opal mines are in Hungary; but this gem is found in other parts of Europe, Sumatra, and the East Indies. Chalcedony is found of different colours. Generally it is of a yellowish-gray colour. Some of the finest have different shades of yellow, laid down in bands. Many coloured chalcedonies are known

as agates. When the colours brown and white, or black and white, occur in flat bands above each other, the chalcedony is named onyx, and is chiefly of two kinds, namely, Arabian onyx and black ribbon agate. Neither of these is abundant. The oriental agate is in colour milk-white, tinged with yellow. Of the various varieties of agate this is the most valued. These three gems are made especial use of in the Florentine mosaics; their exceedingly various colours rendering them particularly available for this purpose. They are also worked into boxes, dishes, and the like, and are not of very high price.

The *woodstones*, as they are called, are composed partly of quartz and partly of chalcedony, and frequently exhibit very clearly the texture of the wood which they have penetrated or *petrified*, as it is called. They occur chiefly in alluvial deposits, or deposits that have been washed down and deposited by water. These deposits are found very near to the earth's surface. Woodstones are cut into snuff-boxes and similar articles. Beautiful varieties are met with at Chemnitz, in Saxony, in Zweibrücken, and in Siberia. Looking over the list of these stones, with which almost everyone is acquainted, it seems really astonishing that one and the same earth should furnish products so unlike and so beautiful simply through the addition of traces of colouring metallic oxides. This earth, combined with others, namely, alumina (the characteristic of which is clay), lime, magnesia, zircon, glucina, and a few metallic oxides, also contributes to form the following precious stones: the emerald, chrysolite, chrysoberyl, topaz, hyacinth, garnet, lapis-lazuli, and labradorite.

Of these, chrysoberyl and chrysolite are not very valuable, and seldom occur of considerable size or beauty. They are transparent green stones; the chrysoberyl pale yellowish-green, the chrysolite blackish or olive green. Most of the chrysoberyl comes from Brazil, Peru, Ceylon, and Siberia, and is rare.

Another stone of a green colour, at least in its finest varieties, is the emerald. Its pure green colour, its transparency and the beautiful polish it takes, render it one of the most valuable of precious stones. The most beautiful emeralds come from Peru and Brazil. They are, however, also to be met with in Egypt, where it has been ascertained a regular trade was carried on in manufacturing them. "The immense emeralds," says Sir G. Wilkinson, "mentioned by ancient authors were doubtless glass imitations of those precious stones. Such were the colossal statue of Serapis in the Egyptian labyrinth, nine cubits, or thirteen feet and a half in height; an emerald presented by the King of Babylon to an Egyptian Pharaoh, which was four cubits, or six feet, long, and three cubits broad; and an obelisk (a tall, four-sided, tapering pillar, cut off at the top like a flat pyramid) in the temple of Jupiter, which was forty cubits, or sixty feet, in height, and four cubits broad, composed of four emeralds; and to have formed statues of glass of such dimensions, even allowing them to have been of different pieces, was a greater triumph of skill than imitating the stones.

That the Egyptians, more than three thousand years ago, were well acquainted, not only with the manufacture of common glass for beads and bottles of ordinary quality, but with the art of staining it of divers colours, is sufficiently proved by the fragments found in the tombs of Thebes. So skilful were they in this complicated process that they imitated the most fanciful devices, and succeeded in counterfeiting the rich hues and brilliancy of precious stones. The green emerald and other expensive gems were successfully imitated. Pliny says the emerald was more easily counterfeited than any other gem, and considers the art of imitating precious stones a far more lucrative piece of deceit than any other which the ingenuity of man has devised. Among the ancients the emerald was sacred to Mercury. The emerald was the first precious stone in the second row of the high priest's breastplate (Exod. xxviii., 18 ; xxxix., 11). It was one of the gems worn by the Tyrians in their clothing, and obtained by them through Syria (Ezek. xxviii., 16 ; xxviii., 13). When heated the emerald changes into blue, but recovers its natural colour on cooling. The emerald also very frequently occurs light greenish-blue, sky-blue, and yellow ; these kinds are called *beryl* or *aquamarine*.

OUR SUNDAY-SCHOOL ALBUM.

BY ENOCH GRATTON.

(Continued from page 159.)

XV.—HARRY HEEDLESS.



HIS young gentleman has the advantage of being well known in not a few districts. His name and face and manners will be very familiar to many readers of the JUVENILE INSTRUCTOR. His character is vividly photographed upon the memory of many a Sunday-school teacher. His conduct has introduced disorder and trouble into more than one class, but he does not much care for this. Indeed, the one phrase which is oftenest upon his lips is, "I don't care." He has been reprov'd, counselled, besought, but he does not care. His attention has been kindly called to the growth of bad habits—the perils of bad company—but he does not care. By his heedlessness his teacher is annoyed, his parents are saddened, his fellow-scholars are interrupted and hindered, but he does not care. On entering the school he does not walk in ; he goes in with a bounce, runs to the class, snatches at a book, has to be told twice what chapter is being read, and more than twice where his place is when it is his turn to read. When he reads you find a sad want of deliberation and correctness ; little words are missed, big words are mispronounced, commas and semicolons are treated with utter contempt—in fact, the whole performance is slovenly and slipshod ; and when the school

is closed, unless Harry is restrained, he scrambles for his hat and rushes out of the room in the wildest and noisiest fashion imaginable. If you stop him and speak to him his reply still is, "I don't care." He does not always say this with his voice, but the silly giggling laugh with which he greets your words, the bold impudent expression which he puts on his face, and the stubborn way in which he rejects your advice, all say unmistakably, "I don't care."

The Bible has a message for this and every heedless boy in our Sunday schools. It says, "Take heed what ye hear;" and again, "Therefore we ought to give the more earnest heed to the things which we have heard, lest at any time we should let them slip"—that is, run out as from leaking vessels. Now, the memory, head, and will of Harry Heedless are leaking vessels, out of which no small amount of precious truth and wise counsel has streamed hitherto. Sowing the truth in his mind has seemed as fruitless work as sowing good seed on a heap of sand. The boy who won't care, who won't listen, learn, and remember, is a great trouble to others, and is sure to get into trouble himself. He will have care enough just now. If not care in the sense of prudence and consideration, yet care in the sense of distress, wretchedness, and anguish. "He that being often reproved, hardeneth his neck, shall suddenly be destroyed, and that without remedy." My advice to *Harry Heedless* is, *Be wise in time. Take heed.*

XVI.—MR. OLDWAYS.

THIS is a respectable, upright old gentleman, a true Christian, whose acquaintance I formed a good while ago, and whose carte has been in my album so long that it is somewhat faded and dim. Still the general form and features of the man are there to this day.

Mr. Oldways is a man of long if not varied experience—of tenacious purpose, if not of broad and loving sympathy. He once did some really good work for the school, and was not behind the bulk of his co-workers in intelligence and vigour; and for the sake of "auld lang syne" I should not like to put him out of the album. Still it has long been felt that he is not the man for these pushing, wide-awake times—that is, unless he could change many of his habits, and plans, and ideas. He stands firmly in what he calls "the good old ways," and has no faith in men given to change, even if it be from weakness to strength, from bad to good, from good to still better.

The difficulty is to convince him that anything could be better than that which has done so long. He has little sympathy with new-fangled notions of any sort. Attempts at reform he brands as bold, revolutionary acts. Why can't men let things alone? The present rules and methods have done for his time, and probably for the time before his. Why not do now? As it was in the beginning, is now, &c., is the motto upon which he acts. He is chin-deep in an old rut; he can't get out, will not be pulled out, in fact does not want to come out, but declares there is plenty of room, not for himself alone, but for the

teachers, and so instead of letting them pull him out he tries to pull them in and down.

In several of their meetings the teachers have tried to construct a ladder—I mean a set of new and improved rules—and knowing that the joints of Mr. Oldways were rather stiff, they thought that by the aid of this ladder he could climb out of the rut; but he refuses the aid of the ladder, and rebukes them for their pains.

Of course this cannot last long. The school will not go on listening to the same worn-out phrases, grinding at the same spiritless tunes, adhering to the same powerless forms. New light will dawn; fresh streams of living force will flow into the school, sweep into the class-room, and around the desk, and if Mr. Oldways is still bound and clogged by custom, this living force will sweep past him and leave him high and dry, with nothing to do but to utter regrets and lamentations.

In another part of my album there is a portrait of one whose character is a complete contrast to that of Mr. *Oldways*. I mean Mr. *Newman*. He is a perfect *bore*. He has always some new idea on hand; he is as fond of change as any child is of change in dolls, toys, and picture-books. A seed has not time to strike root before he pulls it up to put another in its place. To one of these friends we say, Cherish no custom simply because it is old; to the other, adopt no plan simply because it is *new*; to both, accept and foster any method that is really wise, beneficent, and *effective*.

BAND OF HOPE PAPER.

THE OLD SAILOR'S EXPERIENCE.



WE were holding the quarterly lovefeast. Several had spoken of God's love for them, and His providential dealings with them in early life. In one of the front pews sat an old man whose hair and whiskers had become grey; one of his arms was supported by a sling, it had been injured a few days before. He rose to his feet, and in a strong, though tremulous, voice, gave his experience in the following words:—

“‘Godliness is profitable unto all things, having promise of the life which now is, and of that which is to come.’ I have proved this to be correct in my experience through life. In my younger days I was a poor fisherboy, bound apprentice at a very early age to learn how to make nets and fix hooks to catch fish: when older, I was to learn how to navigate the vessel, by means of compass and lead, from the North Sea to London Market. During this time, which lasted until I was twenty-one years of age, I was a very careless youth, without much learning and given a great deal to fighting. The men and master of the vessel often beat me severely, and one time, while

we were heaving up the net in a gale of wind, the master kicked me in the side because I did not hold the rope tight enough. The kick sent me overboard, and I sank under the vessel's bottom, remaining there till almost drowned. The last thought in my mind was that I should be caught in the net, and my mother would have the satisfaction of burying me. One of the men, however, seized a long-handled 'dipper,' and thrust it under the vessel. I closed my arms round it, and was brought to the surface; the men then lifted me on board, but when I came to myself, the first word out of my mouth was an oath.

"About eight months after my apprenticeship was over I left the fishery, and shipped as an ordinary seaman on board a vessel bound to Bombay. During the outward voyage I was greatly imposed on by several of the ship's company, and so made up my mind to leave. After obtaining permission to go on shore for a little liberty, I got a coddie, who was my guide, to conceal me until the ship sailed, which was in about a week. I then left my hiding place, and entered the service of the East India Company for four years, being drafted on board a ten-gun brig of war called the *Tigris*. My eagerness to learn and readiness to obey orders gained me promotion, and I was made captain of the maintop; but being engaged one evening in exercising top-gallant yards, I fell from the maintop to the deck, breaking several bones, and so rendered myself unable to do a regular seaman's duty.

"About the time of my recovery, the purser's steward was caught stealing a bottle of grog; he was disgraced, and the captain appointed me steward in his place.

"There was a young gentleman on board who was a great friend to me; he was the senior midshipman, and I had the care of his wines and spirits. Whenever I wanted a bottle of grog I had only to ask for it, and he would tell me to take it. During this time I was a swearer and a drunkard, spending my evenings in drink; for my duties were generally over at six o'clock. This state of things continued for several months, when an event occurred which surprised and greatly changed me. We had been on a cruise up the Red Sea and had returned to Bombay; the senior midshipman had laid in his stock of wines and spirits, which I had stowed away as ordered, when he and a friend of his went on shore to attend a temperance meeting. There they were convinced of the sin of intemperance, and it pleased the Lord to reveal Himself to them, so that they got their sins pardoned, and returned to the ship converted men. When they came on board they went, unknown to me or any one else, took the stock of wines and spirits, and started it all through the scupper-hole into the harbour. The next night, not knowing what had been done, I went to my friend and asked for a bottle of brandy. He said, 'No, you will never get any more grog from me.' 'Why, sir, what have I done to offend you?' He said, 'You haven't offended me, but I have joined the temperance society, and thrown all my drink overboard.'

After this, he tried to persuade me to leave off the drink, telling me it grieved him much to see me drinking so heavily; so I said that rather than displease him I would give it up and take no more grog, but get pay for it instead.

"Thus I was led to give up the drink, but my swearing habits were still indulged in. One day I was in the spirit room, pumping off spirits to serve out to the ship's company, when my native servant offended me in some way, and caused me to swear at him so dreadfully, that the senior midshipman reproved me. This led me to say that rather than offend my friend I would leave off swearing. He seemed to doubt my sincerity, so I promised; but after the promise I seemed to swear as much as before. He observed this, and, coming to me one day when I was again giving way to the habit, he said, 'Steward, I thought you promised me you would leave off swearing.' I replied, 'So I did, sir, but the more I try the worse I swear.' 'Yes,' he responded, 'and so you will if you trust to your own strength.' This seemed a puzzle to me, so I answered, 'I promised to leave off drinking grog, and you have never seen me taste a drop since, then how cannot I leave this off also?' 'In your own strength,' he said, 'you cannot; but if you are really desirous to leave it off, I will tell you how you may overcome it—ask the Lord Jesus Christ to help you, and He will.' Frequently had I heard such words before, but they seemed now to go through me, and take deep hold on my heart. All that day I felt wretched, and longed for night to come that I might pray. When night did come, instead of hanging up my hammock, I spread it on deck at the corner of the sail bins, where all the spare sails were kept, and there, for the first time, I called upon the Lord.

"During all that night I continued praying for the Saviour to have mercy on me and help me to refrain from swearing, and towards morning I felt a peace of mind which I cannot describe, but which enabled me to rejoice; I seemed to be quite another man. I told my feelings to the senior midshipman, and he rejoiced with me, but told me to watch lest my shipmates should lead me to swear again. This advice was very good, for they soon saw my altered condition, and for a time tried every way to lead me into sin; when, however, they saw me to be sincere, they ceased annoying me, and I had the pleasure of winning a messmate of mine, a quartermaster, to join me at the throne of grace. We often read our Bibles and took sweet counsel together.

"It would be nearly two years after giving up the drink, when I was led to apply for my discharge. As my time was up it was granted, and I went to live on shore in Bombay. There the men and officers frequently called to see me, and urged me strongly to take wine or grog with them, but my determination remained firm. One day, about a month after obtaining my discharge, I went on board to see my old shipmates. The captain was walking the quarter-deck, he beckoned me to him, and said, 'Steward, I give you great praise

for refraining from drink: I tell you, that ever since you professed to have left off drinking I have had a watch over you, and had I known you to take a glass of grog I would have disrated you, and flogged you for doing so, but now I see you are a sober man. I am told also that you have been studying navigation; come to me to-morrow at the Marine Office, and I will do something for you.' On the morrow, when I went to meet the captain, he kindly offered me the situation of chief officer on board a vessel bound for London, but I felt myself incompetent to take so high a position.

"Shortly afterwards I left Bombay, and returned to this country. At Liverpool, I became united with a Methodist class-meeting, and derived much good from it. I continued to study navigation and the laws of shipping and insurance, so that I became qualified to take charge of a barque called the *Brilliant*, and the last eight years of my seafaring life I spent as a shipmaster. The Lord has been very good to me, and His blessing has been the cause of my prosperity."

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS. JULY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
1 The Captive Israelites.....	Exod. i. 1—14.....	Ps. cv. 24.
8 The Deliverer Born.....	Exod. ii. 1—10.....	Heb. xi. 23.
15 Moses' Flight and Exile..	Exod. ii. 11—25....	Heb. xi. 25.
22 God appears to Moses.....	Exod. iii. 1—15....	ver. 6.
29 Moses and Aaron called...	Exod. iv. 1—17.....	Jer. i. 8.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
1 Paul in Cyprus.....	Acts xiii. 1—16.....	2 Cor. iv. 3.
8 Paul at Antioch.....	Acts xiii. 26—41...	ver. 26.
15 Turning to the Gentiles...	Acts xiii. 42—52....	Matt. xii. 21.
22 Paul at Lystra.....	Acts xiv. 8—26.....	1 Cor. viii. 6.
29 The Yoke broken.....	Acts xv. 22—41....	Gal. v. 1.

AUGUST.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
5 The Affliction of Israel...	Exod. v. 1—19.....	Heb. xii. 11.
12 Promises of Deliverance	Exod. vi. 1—13....	Ps. l. 15.
19 The First Plague.....	Exod. vii. 14—25..	Jer. i. 19.
26 The Land of Egypt smitten	Exod. ix. 13—35...	Ps. cii. 15.

AFTERNOON SUBJECTS.		Golden Texts for Repetition.	
SUBJECT.	FOR READING.		
THIRD QUARTER.			
5	Paul sent to Macedonia...	Acts xvi. 1—21...	2 Cor. ii. 14.
12	Paul and Silas in Prison	Acts xvi. 22—40...	Ps. xl. 2.
19	Thessalonians and Bereans	Acts xvii. 1—15...	ver. 11.
26	Paul at Athens.....	Acts xvii. 16—34..	1 Tim. ii. 5.

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

WE are much pleased with the result of the new form we gave to our Puzzles in the INSTRUCTOR for May. The answers sent by some of our young friends both astonish and gratify us. One of them according to promise we now print. It is *among* the best that has been sent; though it would be difficult to call anyone *the* best. The writer of the answer we give is, we believe, about fifteen years of age.

THE THREE JOHNS.

1.—JOHN THE BAPTIST.

John the Baptist was the son of Zacharias and Elizabeth. He was born in the hill country of Judea; but afterwards resided chiefly in the wilderness, till he began to preach. He subsisted mainly on natural products, viz., locusts and wild honey; and had for his clothing camel's hair, and a leathern girdle about his loins. He was called the Baptist, because he baptised the people. He preached the doctrines of baptism and of remission of sins.

Herod, who was tetrarch of Galilee at this time, had married his brother Philip's wife, for which John had reproved him, by saying that it was not lawful to have his brother's wife. On this account Herodias was desirous of having him put to death; but for some time her desire was not gratified. After some time had elapsed she had her wish, for her daughter, dancing before Herod, so pleased him, that he said, with an oath, that she should have whatever she asked, "even unto the half of his kingdom." Whereupon, knowing that it would please her mother, she said, "Give me here the head of John the Baptist in a charger." Though the king was very sorry, yet, because of his oath, he commanded that it should be done. Accordingly John was beheaded. His disciples then took the body of their master and laid it in a tomb.

II.—JOHN THE EVANGELIST.

John the Evangelist was the son of Zebedee and Salome. He was a fisherman by occupation, and prosecuted his calling on the Sea of Galilee. His brother James was called by our Lord at the same time as himself to be His apostles. He wrote several of the books in the New Testament, viz., the Gospel according to St. John, three epistles bearing his name, and the Apocalypse.

He was most distinguished among his companions, the disciples,

by his loving disposition, especially to our Lord; and in his epistles love is also the predominating feature.

He was imprisoned along with Peter for preaching Jesus through the resurrection from the dead, on the occasion of healing the lame man at the Beautiful Gate of the Temple.

He was sent as an exile to Patmos, an island in the *Ægean* sea.

III.—JOHN THE MISSIONARY.

John the Missionary was the son of a woman named Mary. He also bore the name of Mark, and was sometimes called John Mark. In the fifth verse of the thirteenth chapter of the Acts, we read that Paul and Barnabas had John to their minister. This means, that he was their servant or deacon, and his duty was to assist them in minor offices.

John Mark went with Paul and Barnabas on their first missionary journey, which was to Seleucia, Cyprus, &c. At Salamis we are told that they preached the Word of God in the synagogues of the Jews. They then went to Perga in Pamphylia, where John left them, and went to Jerusalem. When they were about to start on their second missionary journey, Paul and Barnabas quarrelled so much about John leaving them at Pamphylia, that "they fell at strife, and parted asunder." Paul took one Silas, and went through Syria and Cilicia, while Barnabas took John, and sailed unto Cyprus.

May 7, 1877.

F. A. MELDRUM.

It is stated as a suggestive fact, that the Saviour of the world has titles in the Bible answering to every letter of the alphabet. Our young readers will please give us a list of them.

WILLINGTON.—On Sunday afternoon, 27th May, our juvenile missionary meeting was held, presided over by Mr. H. A. Brogdon, one of the superintendents, when pieces bearing chiefly on the subject of missions were repeated by Masters M. May, E. Martin, T. Errington, and D. R. Wainman, and by Misses A. Glenton, C. Appleby, J. Rewcastle and I. Stelling. At intervals, select pieces of music were given by the choir, accompanied by the organ, which, blended with the youthful voices of the scholars, added much to the interest of the meeting; indeed, the whole meeting was evidently appreciated and enjoyed by the congregation. Collection, £1 2s. 4d. Following the above, on Wednesday, 30th, a sale of useful and fancy articles was held in the "Joseph Love Memorial School." The proceedings were commenced by the Rev. E. Wainman, by devotional exercises and a short speech. The articles of attire and of ornament prepared for sale by the lady teachers and others, reflect great credit on them, as also did the refreshments and confectionery provided, whilst some amusements conducted by the young men of the school, including a galvanic battery by Mr. W. Paterson. The stalls were attended by Mrs. Brogdon, Misses Wilkinson, Humble, Pescod, Dixon, Middleton, Holliday, Walker, Dunsford, Siddle, Raine, and Snowden. The proceeds, which amount to about £10, will be devoted to the school funds. The managers of the school desire to express their gratification at the liberality with which their efforts have been sustained.

by friends in the locality who are interested in the religious training of the young.—T. D. STEPHINSON.

RIDGWAY MEMORIAL CHAPEL, HANLEY.—We held our juvenile missionary meeting on Sunday, May 13th, Rev. J. Robinson occupied the chair, and gave a very interesting address in opening the meeting. Addresses also were delivered by several friends of the congregation, and dialogues and recitations by the children of the Sabbath School, which were listened to with great interest by a goodly number of friends.—A. STEELE. [Our friends should report the pecuniary result of their efforts.—Ed.]

WOLSTANTON, NEWCASTLE-UNDER-LYME.—Our annual juvenile missionary meeting was held in the chapel on Whit-Sunday, May 20th. There was a large attendance, and a very pleasant afternoon was spent. Mr. S. P. Goodwin, one of the junior teachers, presided; and Messrs. A. Cooper, J. Hughes, and J. Tushingham—all young men in the school—delivered effective addresses. A number of interesting recitations were given, including a dialogue, entitled "Odds and Ends," composed by our young minister, the Rev. E. F. Denton. The financial results of the year's efforts were:—By collection, £1 11s. 6½d.; collected by Miss P. Hobson, £3 5s.; by Miss Booth, £2 2s.; by Misses M. Turner, 18s. 7d.; A. Reece, 17s. 6d.; A. Turner, 15s. 6d.; C. Grocott, 13s.; S. Booth, 13s.; M. Booth, 12s.; A. E. Betteley, 12s.; M. E. Birch-enough, 12s.; S. Bickerton, 12s.; A. Fenton, 10s.; E. Patrick, 10s.; M. Cope, 9s.; L. Hughes, 8s. 6d.; R. Bowers, 8s.; S. A. Evans, 7s. 7d.; M. Fenton, 7s. 8d.; A. Bowers, 7s.; M. Gumley, 7s.; E. Shackleton, 4s. 3½d.; E. Hares, 3s. 8d.; L. Rigby, 3s. 2d.; C. Bellingham, 2s. 1d.; A. and M. Roberts, 1s. 4d.; S. A. Stainer, 10d.; by Messrs. G. Platt and J. Hughes, £2 7s. 7d.; W. Patrick, 10s.; T. Hesketh, 5s.; J. Patrick, 5s.; G. Poulton, 1s. 4d.; making a total for the year of £21 2s. 9d., an advance upon the previous year of £7 11s. 7d., which again was about £5 more than the preceding year. Our young friends are not weary in well doing, but are already commencing determined efforts to realise a still more decided success next year.—DELTA.

LORRIMORE STREET SUNDAY SCHOOL, LONDON.—Our annual juvenile missionary meeting was held on Tuesday, April 24th, 1877. Our able friend, W. J. Denniss, Esq., presided. The meeting was opened by singing and prayer, when the chairman gave us a very interesting speech. The secretary read the report, which showed that the sum of £8 12s. 6d. had been collected during the past year, as follows:—Girls' Classes—Mr. Ralph Heaton's, £1 4s.; Miss L. Wood's, 15s. 6d.; Miss Annie Wood's, 7s. 1d.; Miss Soulb'y's, 7s. 1d.; Miss Leworthy's, 5s. 2d.; Miss Heaton's, 2s. 9d.; Mrs. Lane's, 1s. 7d. Boys' Classes—Mr. Morris's (one quarter), 13s.; Mr. Croker's, 8s. 4d.; Mr. Barnard's, 7s. 9d.; Mr. Thripp's, 4s. 6d.; Mr. Burroughs', 4s.; Mr. Beverton's, 3s. 9d.; Mr. John Heaton's (Infants), 3s. 6d.; Mr. Rooke's, 1s. By Boxes—Miss Sibley's, 11s.; Arthur Keen's, 6s. 4d.; Mrs. Brittain's, 3s. 4d.; Miss Waite's, 2s. 2d.; Mrs. Austin's, 2s. Collected by Scholars—Clara Stoneman, 5s.; Lizzie Woolston, 3s. 10d.; Jane Beale, 3s. 3d.; George Raitt, 2s. 8d.; Mary Heywood, 2s. 6d.; Agnes Bolton, 2s. 3d.; Alice White, 2s. 3d.; Jessie Luffman, 2s. 2d.; Effie Hollis, 2s. 2d.; Maria Horwood, 1s. 9d.; Mary Beverton, 1s. 8d.; Henry Johnson, 1s. 7d.; Emily Ridgwell, 1s. 6d.; Frederick Berry, 1s. 6d.; Florence Johnson, 1s. 1d.; Katie Stock, 1s.; Smaller Sums,

2s. 6d. Total, £8 12s. 6d. After which the children recited and sung some special pieces under the leadership of Mr. Wood, to whom we are very much indebted, not only for training the children to recite and sing, but also by his own efforts raising sufficient funds to defray all expenses, which he has also done in previous years. Miss Rosa Perry Henman accompanied on the harmonium. During the evening Mr. Wood was presented by the teachers with a set of Dr. Kito's Commentaries in a book case, and by the scholars with a bâton, as a token of our respect for him. The collection amounted to £1 19s. 9d., making a total of £10 12s. 8d. Mr. Benson moved, and Mr. Lane seconded, a vote of thanks to Mr. Dennis for his kindness in presiding. This, with singing and prayer, brought our pleasant meeting to a close.—GEORGE BURROUGHS, Sec.

SALEM SUNDAY SCHOOL, MANCHESTER.—We held our annual juvenile missionary meeting in the chapel on Sunday, April 22nd. The opening hymn was announced, and prayer offered by our minister, the Rev. J. W. Williams, after which the chair was taken by Mr. Alderman Jenkinson. The secretary's report was then read, showing the amount collected by the scholars during the past year to be as follows:—On the boys' side, £16 4s. 1½d.; together with a collection, £1 2s. 2½d. Total for the boys, £17 6s. 4d. And on the girls' side, £18 12s. 6d.; together with the collection, £1 11s. 6½d. Total for the girls, £20 4s. 0½d. Total amount for the year, £37 10s. 4½d. Addresses were delivered by Rev. J. W. Williams, Mr. J. J. Harwood, superintendent of the school, and Mr. J. Hampson.—J. B. BLAKELEY.

FELLING SHORE, GATESHEAD.—We held our juvenile missionary meeting here on the evening of Sunday, April 29th. Mr. E. Smith presided, and we had recitations from Misses Jessie Dent, E. Richardson, E. Miller, J. Ovens, E. Sharp, E. Purvis, Joanna Dent, M. Knott, E. Armstrong, J. Robson, and from Masters Samuel Dougal, W. Smith, D. Phillips, R. Ovens, and J. W. Newton. Mr. J. Hopper, of Wardley, and Mr. E. Smith spoke on the subject of our missions in Ireland and China. We had a good congregation, and the collection amounted to £1 4s. 9d., in addition to which the children collected by cards as follows:—Misses E. A. Rennison, 2s. 6d.; J. Ord, 2s. 6d.; J. Duff, 5s.; H. Armstrong, 2s.; E. Gray, 2s. 6d.; M. Cook, 2s. 6d.; M. Knott, 4s.; E. Miller, 3s.; Anne Smith, 8s. 6d.; M. F. Smith, 8s.; J. Dent, 4s. 6d. Masters D. Phillips, 2s.; W. Smith, 5s.; John Tulip, 8s. 6d.; James Buchanan, 7s.; J. W. Newton, 7s. Making the total £4 14s. 3d., something in advance of last year.—Yours truly, NICHOLAS PARKER, Sec.

HARTLEPOOL.—On Whit-Sunday, we held our juvenile missionary meeting in the chapel, when "Parrott's Missionary Meeting" was very effectively rendered by the following scholars:—Masters Geo. Irvine, chairman, T. Woodward, J. Shaw, T. Bolton, and J. Smurthwaite, with Misses Harold, Bolton, Tait, Hodgson, Woodward, and Hodgson, speakers. There was a good attendance, and £1 14s. 10d. was collected, which, added to the sums collected in boxes and by cards, made a total of £5 17s. 7d.—Miss. SMC.

ON Easter Tuesday and Wednesday, April 3rd and 4th, a juvenile bazaar was held in the Oldbury schoolroom in aid of our foreign missions. The room was tastefully decorated, and presented a pleasing and animated appearance. A very creditable collection of useful and fancy articles had been got together by the young people connected with the congregation

and school, assisted by their elder friends. A number of stalls were provided, presided over by Mesdames Harper, Bagnall, and Curry, and Misses Field, Fisher, Taylor, Nash, Nightingale, Whitehouse, P. Sadler, Rushworth, Danks, Manwaring, and Harper. A well supplied and inviting refreshment stall was under the charge of Mesdames Rushworth, Danks, and G. Hinds, Jun., and was largely patronised. A variety of entertainments was provided by Messrs. W. Hinds, Shenton, and Borwick. The entertainments included an art gallery, differing somewhat from the ordinary exhibition bearing that name—a number of scientific curiosities, &c., &c. This part of the arrangements contributed considerably to the amusement of the visitors and the success of the undertaking. A piano was provided, and musical performances were given at intervals. The proceedings commenced on the first day by devotional exercises conducted by the Rev. T. T. Rushworth, after which James Sadler, Esq., in a neat speech, declared the bazaar open. Sales and purchases commenced, and were continued, more or less briskly, to the close. The weather was very unpropitious, yet, notwithstanding this, we were favoured with the presence and patronage of a goodly number of friends. The gross proceeds of the bazaar were £38. A number of the articles, and a quantity of the material offered for sale, had been purchased, and of course had to be paid for. After deducting this, and paying all expenses, we were able to present to the treasurer of our missions the creditable sum of £30. Where all did so well, it would be invidious to single out any for special commendation. The utmost harmony prevailed throughout, and the friends were highly gratified with the result announced—a result which fully answered our expectations.—T. T. R.

Memoirs.

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THE church and school of Hartlepool have been called upon in the space of four short weeks to lose three of their youthful members and friends. They passed away in the morning of life, long before the sun had attained its meridian dignity and diffused its mid-day glories. Like flowers nipped by the wind's unkindly blast, or parched by the sun's director ray, they drooped and died, and all that mortal and earthly of them faded away. Or, like new recruits, unused to the keener conflict and the hotter strife, they fell before they had time and opportunity to rejoice in the conquest of many foes.

They were all members of this Church, their names being found on its register, and, judging by the principle laid down by the Master, "By their fruits ye shall know them," they were members of the mystical body of Jesus Christ.

It was impossible in the short period of their Christianhood to have developed to the fullest extent the graces and virtues of the Christly character. They were babes in Christ, and were found growing in grace and in the knowledge of our Lord and Saviour Jesus Christ. Their godly life, so recently commenced on earth, is being perfected amid the brighter light and more perfect revelations of the world of sanctified spirits.

These three persons were subjects of, and finally succumbed to, the

same bodily infirmity. Consumption, that insidious and fatal enemy to youthful bloom and beauty, laid them prostrate, and finally robbed them of health and strength, and life. They battled with it, armed with the skill and medicine of those ordained to alleviate human suffering, but they battled in vain. They each looked for, and expected for a time, recovery to their wonted vigour; but their hopes were alike disappointed and cut off, for as the days and weeks dragged their weary length along, it was evident to those who watched them that the one enemy would conquer all at last. And so it was, for in the certificates of death supplied by the proper authorities, the same primary cause is named.

The first to be gathered home was

JOHN POUNDER,

THE seventh and youngest son of Cuthbert Ponder, born at Hartlepool on 6th day of March, 1858, and died on the 21st day of December, 1876. He was the son of godly parents who took an interest in the spiritual weal of their offspring. As a consequence of religious training at home, and the instruction received in the Sunday school, he knew the Holy Scriptures from his youth up, and was made wise unto salvation. As a lad, he honoured his father and mother by strict obedience to domestic discipline. The castigation given to most lads was not needed in his case, for it is the testimony of those who lived with him that there was no trouble with him at home. No violent outbursts of temper were displayed, and no rebellious attitude was assumed by him. He was much attached to home, and never manifested any of those roving propensities often seen in lads of his class living in a seaport town. The Sunday school was his delight, and the exercises there proved an invaluable auxiliary to parental oversight and prayer. About eighteen months ago he joined the Church, and made a public profession of godliness. When this fact became known to his Brother College, the two embraced each other in token of fellowship and brotherhood, to be perpetuated in all probability for ever. His attachment to the brother at home, who for years has been afflicted, was most marked, and after the conversion of John that attachment visibly strengthened. When labouring at Sunderland he visited home as often as convenient, and he never returned without offering audible prayer for his brother. He was by trade a joiner, and three years ago he ruptured a blood vessel; and three weeks after the death of his mother, which took place in July of last year, he broke another, from the effects of which he never recovered.

In his affliction the grace of God was manifested in patience and resignation. He clung to the cross of the Crucified and found salvation there. The day before his death I found him suffering, but peaceful and hopeful, and so he continued till mortality was swallowed up of life.

EDWARD WRIGHT,

A FRIEND and companion of John Ponder was the next to follow, and in many respects they were kindred spirits. Edward was born on the same day of the same month of the same year as John Ponder, and died on the 8th day of January, 1877. He, too, had a pious home in which his habits in early life were formed for good. He was trained in the same Sunday school, and ultimately, about the same time, joined the same Church. In early life he valued his home, and manifested unvarying kindness to those of the same household. The same disposition dis-

tinguished him to the day of his death. He had few companions outside his own home, and these were carefully selected. He had a strong regard for self-respect, and ever strove to maintain it. In friendship he was confiding and firm, and never flinched from speaking his mind when occasion required. It was thought by some that he would be fitted to exercise his gifts as a local preacher, and to this end he engaged several times at Castle Eden Colliery in exhortation work. He had a desire to be useful in the Church of his choice, but Providence ordained that Edward should *suffer* in order to reign. Up to the days of young manhood he was strong and healthy. Eighteen months ago he got wet, and for three or four days went about in his damp clothing, and this induced consumption. He little thought at first that such would terminate fatally, but medical men predicted it. Often in his sickness did he say he was better, especially when the days were brighter. But he came to realise his position, saying to those about him, "It will not be long before Christ comes to fetch me home." His strongly affectionate nature could not bear the visits of many of his friends; for, when they were gone, he wept that he should soon see them no more on earth. I saw him about an hour or less before he died, and though speech had left him, consciousness remained, and his look was big with peace and confidence and joy. Just before he died, he called the members of his family one by one, and imprinted a passionate kiss on each, and in peace, if not in triumph, passed away to the evershining shore. His strong and loving spirit has found ampler scope and a more congenial sphere for development and growth.

The last of the three whose loss we name is

ELISABETH MARGARET ANN NUTT,

BORN at Southampton on the 3rd of September, 1857, and departed this life on the 17th of January, 1877. She was always of a somewhat delicate constitution, though never until her last illness laid aside. Her childhood and early youth being spent elsewhere, we are not able to speak particularly; but we are told that for years she has manifested a love of books and home, and for some time past she has been the main temporal support of the household. In disposition, she was somewhat hasty, but quick to regret and generous to forgive. She has been connected with this school and congregation about three years, and in fellowship with the Church about a year. She had a most retentive memory, and often repeated interesting portions of sermons she was permitted to hear. She spoke of this Church and school as one who had delight in coming, and she ceased to come when forced to do so. For a couple of weeks she was ailing, though not fully laid aside, and her friends thought it was weakness, induced by repeated colds; but time told that her days were numbered. In sickness, she turned her thoughts seriously to the approaching end, and spoke of trust and hope in Christ. Pastoral and friendly visits were always fully appreciated. She spoke of going home first, and of her intention to receive the members of her family when they should put off this tabernacle. So she died, trusting in that Jesus who is the resurrection and the life. So the words are true—

"Friend after friend departs;
Who hath not lost a friend?
There is no union here of hearts,
That finds not here an end."

POPE.



THE STEPPING STONES.

THE STEPPING-STONES.



WE will make of our picture this month a parable for our young readers, and from it try to teach them a few useful lessons.

As you look upon that boy and girls standing so ticklishly on those stones surrounded with water, you perhaps ask why are they there? They seem to be in danger; have they not gone into it wilfully? Well, they probably have, for boys and girls have a great propensity to go where, in the opinion of elder people, they ought not to go, and do what they ought not to do. They like sometimes to get into what we grown-up people call mischief, and we are not sure that they do not like getting into a little danger as well. It causes an excitement that is pleasant to them. Are they not naughty in this? Perhaps not altogether so. A child who does mischief for mischief's sake is a naughty child. We do not say that there are no such children, but we are charitable enough to think they are not so numerous as some suppose. From recollections of our own childhood we know that a child may be found in mischief without being mischievous. The act we condemn has been done from no badness of heart, as it was not known to be wrong, and the doing of it gratified an innocent curiosity, or gave exercise to pent-up physical energy. The boy is father to the man, and a boyhood without adventure is likely to lead to an inactive and useless manhood. We, therefore, are not for putting down romping lads and lasses, nor have we always dark forebodings for children who have an aptitude for getting into what are called "scrapes." We want brave men and women who will go where duty calls, and do their duty firmly and fully though dangers threaten and formidable difficulties lie in the way. And such men and women can only be bred of boys and girls that have some pluck in them, and are at times a little wilful.

Whether the children in the picture are in the peril they seem to be by their own will or not, in going through life we shall not be able to avoid being in their position. The waters will be spread all around us, and if we miss the stones on which we have to step, certainly we shall have a nice ducking, and it may be we shall get drowned. Our life, from infancy to greatest age, is ever attended with danger. At first the danger relates only to our body, or physical existence. We may be injured or lose our life even by accident or disease. But

with growing years come intelligence and moral responsibility, and then dangers of another kind press upon us; dangers relating to our higher life—to our SOUL and its present and eternal welfare. With regard to these dangers we are not to act a coward's part, we are not to be too much afraid of them, though, on the other hand, we are not to go into them when there is no need, or more than we need. And then our great Father in heaven has graciously provided for our safety and deliverance in all our dangers. What beautiful words are those of the Psalmist:—"Our God is the God of salvation; and to the Lord God belong the issues from death." He is said to bring His people through the water, but if He does He places stepping stones for them to walk upon. We must therefore be careful to put our feet on these. Sometimes we shall find it difficult to do, but He will help us in our difficulty. In His Word we read that He is a God nigh at hand and not afar off, a very present help in time of need. We hope all our young readers will remember this, and as they step from one stone to another will hold out their hands to lay hold of the hand of God, and then we are sure they will ever be kept from falling.

Again, while we look to God for help to walk on the stepping stones placed for our feet, let us seek to help each other in the exercise. It is our duty and will be to our great advantage to do this. Thus helping ourselves, and helping each other, and being all helped of God, we shall so far escape the perils of our earthly pilgrimage as to reach the better country, even a heavenly, which God has prepared for, and where He wishes to bring us all.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 36.

From BEN BARLOW to MRS. BARLOW.

3, Brighton Villas, Regent's Park,
London, July 1st, 187—.

MY DEAR MOTHER,—

I have been so busy going about that I have not had time to write till now. Let me try to tell you where I have been.

Wednesday afternoon we spent at the Zoo. I did enjoy it. We

had a ride on the elephants and dromedaries. I can't tell you half the things we saw. I think almost the funniest were the eagles. They look terribly cruel when still, but when they begin to walk, they move about so much as if they had corns that I could not help laughing. The lions are grand, and so are the tigers. The bears look moped to death, and do nothing but gape and swallow bags of biscuits, paper and all together. The seals are very amusing; they come at the keeper's call, and do several queer things when told. But the monkeys are the chaps for fun. They are playing pranks all the time. I saw one get hold of the end of a lady's ribbon, and in a second he had got her hat inside the cage, pulling it to pieces. But if I go on like this, my letter will be full of animals.

On the Thursday morning we went a steamboat ride down the river to Greenwich. The bridges are fine, and the new Embankment is a splendid piece of work. Greenwich Hospital is a fine place. There are no pensioners kept there now—it is used as a sort of training institution. In the museum are a lot of relics of Nelson. In the river are anchored some old men-of-war which are now used as training ships for the navy.

In the afternoon we went to the Tower, and were marched round by the beef-eaters in their queer old dresses. It was wonderfully interesting, but the beef-eater who took us round talked through his nose, and he hurried us through as if his appetite made him impatient for his tea. We saw the headsman's axe and block, the instruments of torture, and the cell in which Sir Walter Raleigh was confined. We also saw the ancient armour and the royal jewels.

After leaving the Tower we went to St. Paul's Cathedral, and Ted and I got up right into the golden ball above the dome and just under the cross. There are more than six hundred steps from the nave to the ball. London lies like a map at your feet when you are up there. Of course we tried the whispering gallery, and saw the great clock, which has to be wound up every day, the hanging staircase, and the rest of the sights. It is indeed a grand building.

On Friday we went to the National Gallery, which is right opposite Nelson's Column in Trafalgar Square. I liked Wilkie's and Landseer's pictures best, I think. Wilkie's are humorous and homely, and Landseer's are nearly all pictures of animals.

We then went to the British Museum, but we saw so many wonderful things there that it is useless attempting to tell you of them now.

At night, Mr. Instone had what he calls a musical evening. I told you he was a musician. Well, two or three times a month he gets about half-a-dozen other players to come and bring their violins, violoncellos, flutes, and clarionets, and they have quite a concert just for their own pleasure. Ted had great fun of the clarionet player, he was a very funny-looking German, but when the playing began he enjoyed it too much to joke.

Early this morning we went to see the fish market at Billingsgate,

and called at Covent Garden on the way back to breakfast. After which we took little Ernie out into the Park for about an hour.

I hope you will let me stay until Wednesday, for I don't seem to have seen half I want to see yet.

Give my love to father and sisters, and believe me, dearest mother, your affectionate son,
BEN.

Letter No. 37.

FROM MRS. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne,
July 3rd, 187—.

MY DEAR BEN,—

I am very pleased to hear you are enjoying yourself, but fear you are doing too much in the time. I am glad you are not forgetting your invalid friend, little Ernie. Try and make his life a bit the brighter while you are there.

Your father and I do not object to your staying until Wednesday, if you are sure your friends are not tired of you. We shall, therefore, expect you on Wednesday by the early mail as arranged. Remember me politely to your friends. Your father, and Clara, and Helen send love, so do I. Your own MOTHER.

P.S.—Charlie Thornton and the rest of the boys broke up on Saturday. They want to know when you will return.

Letter No. 38.

FROM BEN BARLOW TO MRS. BARLOW.

3, Brighton Villas,
London, July 4th, 187—.

MY DEAR MOTHER,—

Thanks for your permission to stay till to-morrow. Where do you think I went on Sunday? We went to morning service in St. Paul's Cathedral. It was a beautiful service, and a grand sermon by one of the canons. In the afternoon we went to Westminster Abbey and heard Dean Stanley. He does preach beautifully. The Abbey is the most beautiful old place I have yet seen, and it is almost full of monuments. It seems as if every poet, statesman, soldier, or philosopher I ever heard of had got a monument there. I saw Livingstone's grave. I could have spent a whole day in the Abbey. At night we went across the river to Mr. Spurgeon's Tabernacle. It is a tremendous place, and yet it is filled at almost every service. Mr. Spurgeon preached very earnestly, and told lots of anecdotes, some rather funny.

Yesterday we went by underground railway to Westminster again, to see the Houses of Parliament. The exterior is very beautiful. The House of Commons is not so big as I expected. We also went

into Westminster Hall, and peeped in at the Law Courts, where the judges in their wigs and gowns were presiding. The Law Courts reminded me of the little chapel at the end of the village—they are such close little places.

In the afternoon we went to Madame Tussaud's Waxwork. It was a treat. I mistook several figures for real men and women. Ted did laugh at me. We saw the Napoleon relics, and the old coronation robes. But the Chamber of Horrors made me feel very queer, I can tell you.

This morning we had a stroll through the streets. We saw the house where Dr. Johnson lived for a long time, the tavern where he and Reynolds and Goldsmith used to meet, and such a lot of streets and places that we read about in history.

I should like to stay even longer, but for all that I shall be very glad to see you all again. It seems quite a long time since I left home. We shall leave to-morrow by the train father told me of, and hope to find you all well. With best love, I remain, your affectionate son,
BEN.

Letter No. 39.

FROM TED INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park,
London, July 13th, 187—.

MY DEAR BEN,—

I got safe home about noon yesterday. Everybody is about as usual. Ernie just a little better. He cried for joy when I gave him your present. He has written himself to thank you. Excuse his writing and spelling, his ill-health has prevented him from making much progress in either.

I wish Ernie could have been with me at Woodbourne. He was delighted when I told him about Upleigh Wood, your father's large garden, the great mill-pond, and all the rest of it. I never enjoyed myself so much as I did at Woodbourne.

Remember to me to Thornton, Blunt, and Bland, and the rest of your jolly old schoolfellows. What do you think? My father went to school with your rector when they were boys.

Give our kind regards to your dear father, and mother, and sisters. I am, your affectionate friend,
TED INSTONE.

Letter No. 40.

FROM ERNIE INSTONE to BEN BARLOW.

London, July 13th, 187—.

MY DEAR MASTER BARLOW,—

it was Kind of you to rember what i said one Night when you were talking off your Rabits. i never thawt you would send me one, and there when ted come, i found you had Sent me the lovllyest

little Rabbit i ever saw, and such a prety little Hutch too. it is very Tame and eats out off my hand. we have told a Hauker to bring it Green stuf every day.

i don't know how to Thank you for your hansom Presunt, but every time i see the Rabbit i shall think off your kindnes to me. I remane, yours very greatfully,
ERNIE INSTONE.

Letter No. 41.

FROM BEN BARLOW to ERNIE INSTONE.

The Laurels, Woodbourne,
July 16th, 187—.

MY DEAR ERNIE,—

I am glad you like the rabbit. It was of no use to me, I have such a lot, and as for the hutch, our man Bob knocked it together in about an hour.

I hope the rabbit will do well in London. You must not let it have too much green food. About two handsful twice a day will do. Mind and keep it safe from cats. I remember the cats I saw in London were big enough to worry a lamb, let alone a little rabbit. Hoping you are better, I remain, yours truly,
BEN BARLOW.

Letter No. 42.

FROM BEN BARLOW to TED INSTONE.

The Laurels, Woodbourne,
July 20th, 187—.

MY DEAR TED,—

Your letter came duly to hand, but I have been off fishing nearly every day this week, and have put off replying.

I am very glad you enjoyed your visit, and more pleased still that you should think well of my schoolfellows. I can tell you the good opinion is not all on one side. At first, you know, they were a bit shy, but when they saw you could handle a bat and pull an oar as well as here and there one, they soon came round. They say now that you are quite different from what they expected a Londoner to be.

Bob says you are much the same sort as us village boys, but, like a well-groomed horse, you are a bit smoother on the surface. That is a high compliment for you, for Bob is a great judge of character and never flatters.

Has your brother John gone back to his duties yet? Tell him I shall never be out of his debt for marching me up and down London as he did. Father says I saw as much in a week as some folks would in a month.

Only two more weeks of holiday! I have had plenty of fun certainly, but it doesn't seem long till school begins again.

With love to Ernie and yourself, and kind regards to your father, mother, and big brothers, I remain, yours affectionately,

BEN BARLOW.

Letter No. 43.

From TED INSTONE to BEN BARLOW.

3, Brighton Villas, London,
August 4th, 187—.

MY DEAR BEN,—

Only four more days and we shall meet again—not at Philippi, but at Worcester! John went back to work ten days ago, and since then I have been somewhat moped. If it had not been for Ernie's rabbit, I might have gone melancholy. It has amused me as much as it has its owner. We let it run about the lawn occasionally, and as it jumps about it flirts that comical bit of a tail about in the funniest fashion. It always seems to be showing the white feather.

Father has bought me a splendid new bat to take to school with me, so I shall go into cricketing strongly. I shall run you close for the highest score of the season. Don't forget *your* bat.

Till we meet again, I remain, in resigned but dismal apprehension,
yours truly,
TED INSTONE.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XVIII.—THE ASS.



THE animal we are now to consider does not occupy a very high place in the public esteem, but a more useful, patient, faithful, indefatigable creature does not exist. He possesses solid qualities of the most invaluable kind, and is worthy of far better treatment than in England he generally receives. But he seems to have been condemned to the commonest drudgery of life, and insult has been added to injury by the very meanness of his occupations being transferred to his character. Generally he has but a meagre allowance doled out to him, and he is compelled to pick up the remainder of a scanty subsistence by the wayside; and every mischievous lad seems to think it one of his most precious privileges to tease and torment him in the utmost degree. But in Spain good food and kind treatment, joined with the influences of a milder climate, transform him into a truly noble beast. Between the Spanish peasant and his ass there grows up a friendship like that which exists between the Arab and his horse. Everyone who has read "Don Quixote" must have been

struck with the love that Sancho Panza is represented to have for "Dapple"—he attends to his comfort at the sacrifice of his own, and mourns his absence as he would that of a dear friend.

We do not affirm that the ass is master of brilliant abilities, but he unquestionably possesses those that are solid and useful. His voice may not be very tuneful, nor his air majestic, nor his manners polished, but then every one cannot be a gentleman. His behaviour under all circumstances is natural and simple and unaffected. Unlike the horse, who indulges in all kinds of mad pranks when at liberty, the ass is perfectly sedate when turned loose to graze upon the common. When he has had his fill he does not seek to evade the halter, but will stand still with his back to the wind waiting for the "Kim up, Neddy," which is the law of his being. He marches along with a very uniform pace, and, though not remarkable for swiftness, he can yet go a long distance without resting. Unostentatious in all his proceedings, he works with steady perseverance, and finishes his work in silence—which is more than can be said of many servants that man employs. His food requires little preparation; he can subsist comfortably on coarse grass that other animals would disdain, and the prickly thistle he counts an actual delicacy. Whatever is offered to him he accepts with a thankful expression, and is always ready to resume his employment when his hasty meal is finished.

If the duties he discharges appear mean, they are, after all, very important. The labours of the peasant and the artisan are of more direct advantage to the public weal than the occupations of many that are in stations far higher. For it is from their labours that our food and our clothes and our houses are obtained, and a most valuable ally they ever find in the ass for the transportation of fruit, vegetables, seed, sand, wood, etc. The number of donkeys employed in what we may call the commissariat department of London alone is prodigious. The labours of this animal constitute no insignificant portion of the vast arrangements needful to keep the teeming millions of the great metropolis supplied with the necessaries of life.

The donkey is often strongly attached to his owner notwithstanding much ill-usage, and will readily distinguish him from all others in a crowd of people. The she ass is remarkably fond of her young, and will rush through fire or water to join or protect it. It is a pleasing thing to find that God has implanted in every creature a love that will lead them to sacrifice their own interests to the good of others.

Asses were common in this country in the eighth and ninth centuries, but through some accident or other the race for several centuries became altogether or nearly extinct. Hollinshed informs us that in the reign of Elizabeth "our lande did yeelde ne asses." When soon after they were imported from Spain, they were so much an object of curiosity as to be worth about a hundred guineas each.

The mule, which is partly horse and partly ass, is a valuable animal on account of its being so surefooted. It can carry heavy burdens, and mount or descend the steepest hills with ease. In Spain people of the highest rank are drawn by mules, many of which will sell for fifty or sixty pounds a-piece. From twenty to thirty years is the ordinary duration of the mule's life.

The zebra is a kind of wild ass, and is probably the animal so poetically described in Job xxxix., 5—8, "Who hath sent out the wild ass free? or who hath loosed the bands of the wild ass? Whose house I have made the wilderness, and the barren land his dwellings. He scorneth the multitude of the city, neither regardeth he the crying of the driver. The range of the mountains is his pasture, and he searcheth after every green thing." In South Africa small herds of zebras may occasionally be seen feeding on the extensive plains. But so swift are their movements that they leave very readily every pursuer far behind. Like that of the ass the head of the zebra is large, its back straight, and its tail tufted at the end; like the horse, its skin is smooth and sleek, and its hind quarters full and fleshy. Its ears are neither so long as those of the ass, nor so short as those of the horse. But its greatest beauty lies in its colours. These colours are white and brown, or white and black, and are disposed in alternate stripes all over the entire body with an exactness and symmetry that no painter could possibly attain. These stripes are narrow, parallel, and separated by exact distances from each other, and look like so many ribands laid over the body. The zebra has not as yet been tamed and trained for man's service. If this result should ever be accomplished, man would have at his service as swift and beautiful a creature as moves on the face of the earth.

The goodness of God is seen in providing us with animals of very various capabilities, so that by their aid all Nature is laid under contribution for the benefit of man. Nor is that goodness less conspicuously seen in the fact that every animal's disposition and habits are attuned to his way of life; and the donkey has as much satisfaction in the dull round of duties he is called to discharge as the gaily caparisoned horse with his greater publicity and glitter and show. God, who is said to temper the wind to the shorn lamb, has unquestionably given to the creatures He has made for our service a spirit and temper that exactly agree with the place they are called to occupy. The patience of the ass might be a defect in the high-spirited horse, and the fiery impetuosity of the horse would certainly ill accord with the humbler duties and less elaborate organisation of the donkey. From beginning to end the arrangements of Nature are so perfect that the most inventive intellect cannot suggest improvement; all that we can do is to behold and reflect in order that we may appreciate and admire.

TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CHAPTER XII.—A FIGHT IN THE BILLIARD-ROOM.



R. TRUEMAN was alarmed. He felt as much concerned for the young men, but especially Foster, as he did for his own safety. He knew that men with their slender means could not drink as they evidently did and be honest.

"I am very sorry this has turned up just as I am going away," said he to his manager; "but it cannot be helped now. Let the thing take its course until I return. Say nothing to them in my absence, nor do anything that will lead them to think we know anything about this affair. Book the name of the horse upon which Barker said he had bet his money. The race will be over a day or two before I return, unless I can come earlier than I had thought, and this I must try to do. In the meantime keep a sharp look-out, and pick up any scraps of information that you can without creating suspicion. Of Barker for some time I have been rather suspicious, and have not liked two or three things which I have seen. I have my fears that he has led Foster away. I have always had great hopes of that youth since the first day Mr. Wood brought him to my office until now. But what I have just seen has shaken my confidence." A few moments later he bid his manager good night and left him.

The next day all went on as usual at the firm. Neither Barker nor Foster had the remotest idea that Mr. Samson, the manager, knew anything of their doings on the previous evening, hence they did not notice that he watched them more closely than usual. A great amount of money passed through Foster's hands. If he really were dishonest, he had many opportunities of appropriating his master's cash. If any fraud had been practised, Mr. Samson determined to find it out. He spent many hours that week at the office after all the rest had left. As well as he was able he examined all the books Foster had in his care, but all was in good order. No irregularity, no trace of tampering, all as straight as he could wish to see. He felt sure that whatever else Foster had done, he had not yet become a thief. This was no small relief to Mr. Samson. He set his heart upon saving him, if that were possible, and determined to know where and how they spent most of their time. Remembering that Mr. Trueman had expressed a wish that the suspicions of the assistants should not be aroused, he had to proceed with caution. This he did, as the reader will see.

To watch them himself was out of the question. He, therefore, spoke to a personal friend of his, who expressed his willingness to assist in any way he could. It was agreed between them that he should place himself near to Mr. Trueman's shop in the

evening, and, when the youths left, follow them, enter where they did, and watch their whole proceedings.

At the appointed time Mr. Earnest was in the neighbourhood of the shop, having previously made himself well acquainted with the faces of Barker and Foster. Mr. Samson left at the usual hour, and walked past Mr. Earnest as if he had never seen him before. Shortly after several young men left the house, and, after passing along the first street in a body, broke off in several directions. Barker and Foster as usual went together. A few minutes' quick walking brought them to a respectable-looking house of its kind, which they immediately entered. From the familiar manner in which they spoke to the landlord, it was evident that they knew one another well. They passed at once to the billiard-room. They had no sooner entered than they called for "brandies," and lit their cigars. There was a somewhat large company for that room; like Barker and Foster they seemed to be mostly clerks or assistants. Whilst most of them were young, there were a few of middle age.

Barker was soon engaged in play, whilst Foster smoked, drank, and watched. Game after game was played, in each of which Barker unfortunately lost. After repeated losses, and drinking several glasses of spirits, he became much excited. His face was flushed, his hand unsteady, and his temper ruffled. At length he charged his opponent with unfair play. This led to angry words, then to blows. A fight ensued, in which Barker was thrown with great force to the floor, and struck in the face by his opponent several times in quick succession. Foster rushed to the assistance of his companion, and with one heavy blow struck his antagonist to the ground. He was about to follow up this blow, when several voices cried out, "Foul play!" and the next moment Foster found himself at full length on the room floor.

CHAPTER XIII.—MAKING BAD WORSE.

A description of the scene which followed the events narrated in the last chapter is almost impossible. All was excitement and noise. Barker lay bleeding on the floor, just where he had fallen; but his opponent and Foster sprang to their feet and would have rushed at each other like tigers, which they much resembled, had not someone interfered. Happily at this moment a gentleman who had sat in the room most of the evening reading the newspaper, and apparently taking little notice of the company, came forth and placed himself between the combatants. With the help of the landlord, the stranger managed to restore peace. Having done so, Foster and he helped up Barker, who was just recovering from the half insensibility into which the blow and fall had thrown him. He had an ugly cut over his eye, from which blood still flowed. They took him out of the room and from the house. When outside the stranger said, "Good-night," and in a moment was gone.

As it was not very late, they succeeded in getting into a chemist's shop. Here Barker's face was washed, his wound dressed, and his clothes brushed. Leaving the shop they made for home. On their way they had to concoct a scheme for deceiving Mr. Samson as to the real cause of Barker's wound. This was an easy task; long before they had reached home Barker had it all "out and dried."

About half-past ten that night a sharp rap was heard at the door of the house in which Mr. Samson lived. "He is early," said that gentleman, as he rose to answer the door, evidently recognising the knock. A few seconds later Mr. Earnest was seated by the fire with a look of sadness upon his face painful to behold. We scarcely need remind the reader that the stranger who settled the dispute in the billiard-room, and helped Barker from the house, was Mr. Earnest. He told all that had passed. "Barker," said he, "has lost ten shillings. Foster has formed a love for drink. I noticed that he took it freely. But beyond the drinking, which is serious enough, I do not think him so bad as his companion."

"Lost ten shillings!" said Mr. Samson, "besides what was spent in liquor! Where does the money come from? He has at this moment a quarter's salary staked on a horse-race, and yet he can lose ten shillings in one night besides. Wherever he gets it, of one thing I now feel certain, *it does not come from his salary.*"

It was arranged that Mr. Earnest should watch for two or three nights more, so that when Mr. Trueman returned, they might, in addition to these facts, be able to say how they spent several of their evenings.

The next morning Barker found himself in so much pain from his wound and other bruises that he did not rise at the usual time. Foster had an ugly lump on the side of his head, but this he could easily hide from the gaze of anyone. Mr. Samson finding that Barker was not at his post, walked into the office to speak to Foster.

"Where is Mr. Barker this morning?" asked the manager in his kindest tone.

"He is a little unwell, and unable to rise," said Foster.

"I am very sorry to hear that," said Mr. Samson; "do you know what is the matter with him? I do hope there is nothing serious."

"Not very serious," said Foster; "he is suffering from the effects of a slight accident with which he met last night."

"Accident!" said the manager, leaning his head forward and opening his eyes wider as if greatly astonished. "Do you know what it was?"

"Yes, very well, for I was with him when it happened. We had been out for a long walk, and were returning home, as near as I can tell, about ten o'clock. Just as we turned a corner to enter the main street, we were passing a rough-looking man, who, without the slightest provocation, struck Barker in the face and then ran off as fast as he could." The manager more astonished than ever said:

"Why did you not follow the man and give him into the policeman's hands?"

"I should have done so, but Barker was so stunned with the blow that I was obliged to attend him. With the help of a stranger I got him into a chemist's shop, had his wound dressed, and then we came straight home."

Whilst making these statements the colour had come to Foster's face, which Mr. Samson carefully noticed, but said nothing about. It would have been strange if such lies had not made him blush. It made the manager's heart ache to hear so base an untruth told to cover up their sins. It was making bad worse. But thus it ever seems to be with wrong-doing. One sin makes another necessary; the second to hide the first, then a third must follow to hide the second. In some respects sin is like a stone rolled down a hill; it goes slowly at first, but gains speed with the distance travelled. Avoid the *first* wrong action, that the second may never follow. Shun the very appearance of evil.

Mr. Samson, after saying that all such wickedness would meet its deserts, left the office and went to see the unfortunate assistant. He had just come down, and was trying to take a little breakfast when the manager entered. He was certainly in a pitiable condition. He had several pieces of sticking-plaster over one eye, and both eyes were black and much swollen. Mr. Samson expressed his sympathy, and asked the cause of his suffering. Barker told the same tale that his companion had done, and added: "I shall be sure to know the man the next time I see him."

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

VIII.—NATURAL PRODUCTS—PRECIOUS STONES. NO. III.



HE belief in the miraculous power of precious stones among the ancients was very great. They drank the powder of chrysolite mingled with wine, with the belief that it was good against fever and melancholy.

Albert Magnus of Lauingen, who lived in the thirteenth century, wrote a work on the virtue of stones, in which he says:—"If you wish to become invisible take an opal and wrap it in a bay-leaf, and it is of such virtue that it will make the bystanders blind, hence it has been called the 'patron of thieves.'"

"If you would avoid all danger, and overcome all earthly things, and possess a stout heart, take an agate. If you would sharpen the understanding, increase your riches, and foresee the future, take an emerald. For prophesying it must be placed beneath the tongue." We are apt to smile at the credulity of these ancients, and wonder where

they got their strange ideas. But we must remember that our forefathers were not altogether free from them, for as late as the end of the last century a great number of precious stones were to be found in the stores of the apothecary, who evidently believed that they possessed some mysterious virtue, and could aid him in his healing art. But we must continue our descriptive account. We now come to a stone that is very familiar, namely, the *topaz*. "Topaz" is mentioned thrice in the Old and once in the New Testament. Among precious stones it stands third from the diamond in respect to hardness. Berzelius gives its constituent parts as—alumina 47·45, silica 34·24, and fluoric acid 7·75. The usual colour of the topaz is of a bright yellow or citron; but it also occurs colourless, bluish-green, and reddish, and may be coloured rosy-red by exposure to a gentle heat. The dark yellow is most highly valued. Noble topazes, or the most brightly transparent varieties, are found in India, in Asia Minor, in Egypt, in some parts of Europe, and in Brazil. The Oriental topaz is the best, and the Brazilian the next in value. Egyptian topaz is softer than the Oriental variety. In the days of Job an Ethiopian variety appears to have been most highly esteemed:—

"But where shall wisdom be found?
And where is the place of understanding?
The topaz of Ethiopia shall not equal it,
Neither shall it be valued with pure gold."

—Job xxvii., 12, 19.

Oriental topaz is no doubt referred to, Ethiopia being the Asiatic country of that name. The prophet names this gem among the precious stones which went to adorn luxurious Tyrus (Ezek. xxviii., 13.) In the New Testament allusion to it, topaz is named in connection with "the foundations of the wall of the city"—the New Jerusalem—"garnished with all manner of precious stones" (Rev. xxi., 20).

The *garnet* is a red stone, which is likewise composed of silica, with alumina and lime, and also oxides of iron and manganese. This stone does indeed occur of other colours, but ordinarily only the red garnets are transparent enough to fit them for cutting as ornamental stones. This mineral is particularly widely diffused, and occurs in the primitive rocks of Scandinavia, in Carthia, and in Tyrol. Not unfrequently it is found in crystals as large as a man's fist; but these garnets are rarely pure. The most beautiful are those called Syrian garnets.

Labradorite exhibits gleams of blue, yellow, green, and copper-coloured reflections, and comes from the coast of Labrador, in North America.

Lapis Lazuli is esteemed on account of its blue colour. Unlike any other precious stone, it is of high value even when pulverised. Ring-stones, snuff-boxes, vases, etc., are made of it, and it is

particularly employed in the inlaying of ornamental tables. It comes from Thibet, Little Bokhara, China, and Chili.

We come now to certain very highly-esteemed precious stones, which contain no silica, but in the composition of which alumina plays an important part. These are *corundum* and *spinel*. The corundum of mineralogists includes the *sapphire* and the *ruby*, which differ not in nature, but only in colour, the sapphire being blue, the ruby red. These are the hardest of all stones excepting the diamond, and are four times heavier than water. The sapphire is chiefly found in the sands of the rivers and in drift, in Ceylon and India. This accounts for the comparative familiarity of the Hebrews with it. They would obtain it, in the earliest period of their history, from the merchants who traded with India by the way of Arabia, and in later times it would be brought by the ships of Tarshish, which traded between Eziongeber and the southern shores of Asia. The sapphire was also highly esteemed among the ancients. On account of its purity and loveliness it is frequently used in poetical figures. It is introduced by Solomon into the description of the glorious person of the royal bridegroom (Song v., 14). In Job's sublime words in regard to the earth it is said—

“The stones of it are the place of sapphires,
And it hath dust of gold” (xxviii., 6).

Red sapphires, or *rubies*, are named seven times in the Old Testament. They are not referred to in the New Testament. The ruby ranks with the diamond and the emerald, and is more highly valued than the blue sapphire. Its brilliance loses nothing when seen by artificial light, and on that account it has ever been greatly esteemed. The finest are those which are either of a pure carmine or of a blood-red colour. There are many varieties; sometimes it is bright rose-red, and passes from that colour to the soft delicate hue of the peach-blossom. The ruby was one of the chosen stones to be used in decorating the priest's garments of Aaron.

Job acknowledges its preciousness when he says, “The price of wisdom is above rubies.” Solomon also sets the value of wisdom in contrast with this gem—“She is more precious than rubies” (Prov. iii., 15).

There remain three other precious stones greatly esteemed, which are of totally different composition from the foregoing. These bear the names of *turquoise*, *malachite*, and *amber*. The turquoise is opaque, and of sky-blue or greenish-blue colour. A portion of what are called turquoises are composed of the bones and teeth of fossil animals, coloured by oxide of copper or phosphate of iron. These occur chiefly in Siberia. The mineral turquoise comes from Persia. According to the belief of the ancients, the turquoise had most excellent properties; one of the most important mentioned is that it destroyed animosity, and in particular appeased discord between man and wife.

Malachite is a true copper ore, and consists of hydrated carbonate of the oxide of copper. It is opaque, and of a fine green. It occurs very abundantly, and in all places where copper ores present themselves, but Siberia furnishes the finest stones.

Amber is a substance of totally different origin, and does not originally belong to the mineral kingdom. It is a kind of resin produced by pines growing in former geological epochs, and often contains little insects, spiders and the like, imbedded in it. The greatest quantity is found on the coasts of the Baltic. But amber has been found also in Saxony, Spain, Sicily, England, and China. Among the ancients it was called *electron*, probably because of the power it possesses of attracting light bodies when rubbed. The word electricity is derived from it. We now close our short review of the glories of the precious minerals, in the hope that our young readers will henceforth be led to take a deeper interest in the glories of the underground world.

But perhaps someone may ask how it is that in this description of precious stones, the noblest of all, the maker of gold, and giver of immortality, namely the *philosopher's stone*, has been unfairly forgotten. By way of providing an answer, if such question should be asked, we will add, in conformity with the exact truth, that history does indeed tell much of how men have sought for it, but not that anyone ever found it; and we are at present still further behind than our ancestors of a thousand years ago, for we refuse even to seek for it.

OUR SUNDAY-SCHOOL ALBUM.

BY ENOCH GRATTON.

(Continued from page 186.)

XVII.—MR. SMART, THE SHALLOW TEACHER.

THE first impression made upon some minds by this friend is decidedly favourable. He is a taking young man, and those who do not know him thoroughly are liable to be taken in when they form an estimate of his ability and work. One of the most frequent questions now asked about people is this, "Are they *nice*?" Not are they noble, true, wise, or brave, but are they *nice*. Now the teacher whose carte I ask you to look at is *nice*. He is polished and veneered, and done up in most exquisite style. He is quite a conspicuous figure in the school, and not less so out of it. If you only saw him on Sunday evenings parading the streets with lofty airs and striking gestures; if you only saw how elegantly he can handle his cigar, and heard how politely he can pour forth his flippant phrases, you would believe that he was *nice*. If you are satisfied with outward display and glitter, by all means make Mr. Smart your friend. It is in the Sabbath class that

Mr. Smart's real value is discovered. There he cuts a sorry figure. He has never deeply studied the Book he attempts to explain; he has only skimmed over the surface of detached bits here and there. The Master is still saying, "Launch out into the deep, and let down your nets for a draught;" but our friend prefers to dabble in shallow waters. Wisdom is promised to him that asks for it, that seeks for it as for silver, and digs for it as for hid treasures; but Mr. Smart says, I cannot dig, and to beg I am ashamed. The strong and steadfast man is like one who built a house and *digged deep* and laid the foundation on a rock, and when the flood came the stream did beat vehemently upon that house and could not shake it—could not even *shake* it. Mr. Smart is like the man who, without a foundation, built a house upon the sand.

The radical defect in the character of this amiable young man is a lack of depth, intensity, and force. His knowledge is shallow; his convictions are shallow; his emotions are shallow. Character must have roots; mere stems and leaves will not suffice; roots embedded in the rich soil of eternal truth—roots fastened to the Rock of Ages, and which can bid defiance to the rudest blasts of adversity. "It is a good thing that the heart be established with grace."

XVIII.—MARY SORROWFUL, THE DRUNKARD'S CHILD.

The interest clinging to the portrait of this dear girl is large and in part painful. Though young when I first knew her, her face bore unmistakable marks of care and suffering. That face was pale, anxious, and thoughtful. It usually wore a sad and prematurely old look. To my mind few things are more painful than to see a child with a face brimful of human care; with no ruddy glow on the cheek, no innocent mirth sparkling in the eye, no inclination to romp and shout and laugh; but, on the contrary, inclined to weep and sigh and brood. Yet that is the hard lot which is being thrust upon myriads of children in England every day by the intemperance and folly of their parents. This I well know was the lot of Mary Sorrowful. I have seen her father in a bad and helpless condition even when she was exceedingly ill. She grieved on account of her father's sin, and her mother's sorrow and perplexity. When she thought of the waste of money, the wreck of health, the blight of peace, and the shabby, if not beggared, condition to which they were reduced, her young heart would bleed with anguish. I am glad to say that the drunkenness and neglect of her father did not harden and freeze her heart. In spite of all she was clinging, tender, and true. It was a small world in which Mary lived, yet there was in it one bright spot—the Sunday school. This sunny spot she ardently loved. The sweetest moments of her life were those she spent in listening to the voice of a faithful teacher, and singing the praises of her beloved Redeemer, or bending in earnest supplication at the throne of Him who listens to the cry of the poor and needy.

She became a member of one of our Churches, regularly met in class, and spoke of the love of Jesus, and her joy in Him, in simple, clear, and convincing words. I saw her in her last hour on earth. No happier deathbed scene did I ever witness than that of the poor suffering child of the drunkard. I shall never forget it. Her face beamed with celestial brightness. She told me of the place where she first heard the pardoning voice of Jesus; of the very words which brought to her soul unspeakable peace. They were these—

“ My God I am Thine, what a comfort divine,
What a blessing to know that my Jesus is mine ;
In the heavenly Lamb thrice happy I am,
And my heart it doth dance at the sound of His name.”

These words she sung not long before she died, and in this rejoicing spirit she passed away from a home of care and sin on earth to a sinless, sorrowless home in heaven. Her memory is precious and sacred.

XIX.—THE POMPOUS SUPERINTENDENT.

The carte to which I now invite your attention will give you but a faint idea of the dignity and importance of the original. The first glance will convince you that he thinks no small things of himself. Some of the teachers believe that he thinks more highly of himself than he ought to think. He was not elected at first because of any special fitness for the post, not because he possessed rare graces and ripe gifts; not because he was apt to teach or rule, but because it was thought his appointment would confer honour upon the school. He lives in a large house, has a big family pew in the chapel. It was not a hard thing to get him into office, but it is a hard thing to get him out. If he were not re-elected from year to year he might be offended and leave the chapel and school.

Nobody *desires* that, still worse things might happen. The school contains men far better able to guide and control than this man, with his great swelling words and magisterial bearing. He is a big man, he has money, and assurance, and position; but the school made a bad bargain when it engaged him to be its king. In fact he is too big by far for his present position. He cannot bend, and turn, and go as a superintendent ought to be able to do. His head is too high to recognise a little child or a poor teacher. If you could only take the stiffness out of his joints, and the starch out of his manners, and the conceit out of his soul, and if he would learn of Him who is meek and lowly of heart, and who set a little child in the midst of His disciples and told them if they would become great, they must become childlike, then he might be a power for good in the school. Those who now stand aloof from him would love him and cling to him. His dignity and importance would not be diminished; on the contrary, they would increase in grace and attractiveness.

GEORGE IV. AT HOLYROOD.



EDINBURGH was first called, in the seventh century, Edwin's Burgh, after Edwin, King of Northumberland. After the murder of James IX. in the fifteenth century, the Castle of Edinburgh was selected as the stronghold for the government offices and the royal family, and then the city became the capital of the kingdom. It was a walled city, and it became necessary to make it as large as possible, therefore it was increased in height instead of breadth, and the houses ran up and up, like Jack's bean, until they became ten and eleven stories high. The old city was built upon three parallel ridges running east and west, and on the west end of the central ridge is the Castle of Edinburgh, and at the east end is the Castle of Holyrood.

I wonder if you know about one of the last royal entertainments that gathered in the Palace of Holyrood. Before we begin the story, we will tell how the palace happened to receive its name.

Adjoining the palace is the ruin of an old abbey built by King David I. One day the king was hunting in the forest of Drumselch, when he was attacked by a large deer, and, as he carelessly dropped his weapon, his life became in imminent danger. He was endeavouring to ward off the furious assaults of the animal with his hands, but, becoming weary and faint, was about to resign himself to death, when a cross, called a rood, was dropped from heaven into his hands, the sight of which so frightened the animal that he turned and fled. This wonderful circumstance put an end to the chase, and the king returned to the Castle of Edinburgh. That night a vision appeared, in which he was instructed to erect an abbey where he received the heavenly cross. In obedience to the dream, in 1128, he built an abbey for the canons, and called it Holy-rood, or Holy-cross, and deposited therein the cross which was sent from heaven, where it remained until the reign of David II.

The palace of Holyrood was commenced by James V. in 1528, and was the residence of the kings. Since Edinburgh ceased to be the seat of a court, the palace has only been used by the kings when they visited Scotland, and the last visit was made by George IV. about fifty years ago. The Scots had not seen a king in their country for nearly two hundred years—some time in the reign of Charles II.—and though they had but little affection for King George IV., who came of the Hanoverian line, they determined, by extra demonstrations of loyalty, to make up for the rude treatment of former princes. As soon as King George IV. expressed a wish to hold a levée and meet all the nobility of Scotland, earls, dukes, lords, all began preparations to make this as elegant a reception as any ever held by the king in London. The men felt great solicitude, but all the ladies, whose family or fortune could in any way give them the privilege of appearing at court, felt an anxiety far in excess of any before

experienced on any occasion in their lives. Those who had appeared in court in London tried to encourage their friends, and instruct their daughters in all the court etiquette. The family coronets and jewels were brightened; velvet, silk, and satin were made into court dresses. Feathers were in such demand that it was decreed that not more than two dozen should be worn on any one head. The dresses were made with a train of several yards in length, and the ladies were taught how to carry this trail of velvet or silk under the arm, and then drop it, at the right moment, in a genteel manner, and cause it to spread gracefully behind. The sleeves were made short, and adorned with Brussels lace; the same kind of lace, ostrich feathers, and diamonds on the head; rich ornaments at the neck, wrists, and belt.

The gentlemen's court dress was made of wine-coloured cloth, the pockets, wrist-bands, and collar embroidered; the ruffles at the wrist of point-lace; the hose white silk, and the knee-breeches of white cashmere fastened below the knee with silver or diamond buckles. Those who were to be presented at court hastened to Holyrood palace during all the hours of the morning, many, to be there in season, rising earlier than ever before in their lives. When the door into the room where these people were congregated was opened, and the usher of the white rod announced that the king desired the honour of the ladies' company in the presence-chamber, much as the ladies had desired to do themselves this honour, so great was the dread of entering his Majesty's presence, that the first to enter, a countess, turned deathly pale and trembled like a rose-leaf in a storm. It must have required real courage to enter the room alone, giving up her attendant's arm at the door, pull off one glove, let down her train, hear her name announced, and then advance, with the eyes of the king and his attendants fixed upon her, across a large apartment, be again announced, properly meet and greet the king, feel sure when the conference was ended, and gracefully retire backward to the door. A lady who witnessed this drawing-room reception said the change of countenance from one of anxiety on entering, to one of satisfaction when leaving the audience-room, was marvellous. Though not quite all wore the satisfied look at the close of the reception, for a few made egregious blunders, which spoiled all their pleasure on the occasion.

One very fat lady, just as she reached the king, caught her foot in her dress, and fell on her knees before him. This was too funny for even the politeness of a king, and he had to put his handkerchief to his face to conceal his merriment. The lady was too fat to help herself, and her face turned first red, then purple, when a man with strong arms lifted her from her humble position, and she beat a hasty retreat. A young lady mistook one of the lords for the king. She was very handsome, and the lord took the privilege of the king, kissed her cheek, and then told her of her mistake.

One lady, in retiring, became entangled in her dress, and in her confusion whirled round and round like a dancing dervish, until she

became so bewildered that she could not stand, when a friendly hand caught her and assisted her to the door, where she vanished from the sight of the king and his suite.

After three hours this reception was over, the king left the audience-room, and in a few days the country, but all who appeared at this court considered it the greatest event of their lives.

OUR NEAREST PLANETARY NEIGHBOUR.

“EIGHBOUR” did we say? Why, the planet we are to treat of is, when nearest to us, twenty-seven million miles away—a distance which would take a cannon ball, flying at the rate of five hundred miles an hour, six years and three months to traverse.

Yet, when we compare the distance of this planet from the earth proportionately with that of the other heavenly bodies, it has a good claim to be considered a neighbour.

In the Western sky, during the long summer twilight hours, there shines a bright star—so bright and beautiful that astronomers have named it after the fairest of heathen divinities—the goddess Venus. It may be interesting to point our telescope to the West for a few moments, and try to learn a little about this “gem of the crimson coloured even.”

Well, then, to descend from poetry to figures, we shall find that the surface of Venus is about nine-tenths of that of the earth, that is to say, she is far nearer to the earth in size than any of the other planets.

So similar in this respect is Venus to our own globe that Flammarion, an enthusiastic French writer, appears to be very anxious to pay her a visit; he tells us that “all the magnificence of light and day which we enjoy on the earth, Venus possesses in a higher degree.” Yet it is possible to have too much of “light and day,” and we fancy, were Flammarion transported to the orb of his choice for a short time, he would have too much; for in Venus, be it known, there is no temperate zone; but, on the contrary, the arctic and tropical zones overlap, so that we have arctic and tropical regions far more severe in temperature than ours, whilst between we have a region subject to tropical heat and arctic cold in turn.

The German astronomer Schröter, who flourished towards the close of the last century, was the first to discover the existence of mountains on Venus: he estimated some to be as high as twenty-eight miles. His statements were not at first believed, and Sir William Herschel wrote a critique disproving them; yet time has shown them to be correct in the main.

The length of the day in our neighbouring planet closely corresponds to that of our own. Some astronomers, following

Bianchini's lead, assigned her a rotation of over twenty-four of our days, but it is now generally agreed that the day is twenty-three hours, twenty-one minutes long.

Two or three words and then I conclude.

Is there not a grand lesson to be learned from Astronomy? Does it not furnish an indisputable proof, if one be needed, of the existence of a Supreme Being? Turn to the West when the sun has set and view the bright orb of Venus; or, later on, when "the immeasurable heavens break open to their highest," gaze upwards at the myriad stars that stud the beauteous milky-way, and ask what hand but that of God could have formed those countless suns; what hand but His could have arranged and set in motion the mighty mechanism of those vast systems. Then you will be ready to exclaim, "The heavens declare the glory of God, the firmament sheweth His handiwork."

J. H. P.

A CLEAR DEFINITION.

A MINISTER was preaching a special sermon for children and asking them various questions. In the course of his remarks he said, "Can anyone tell me the difference between a maker and a creator?" One of the scholars replied, "One makes something out of something, and the other makes something out of nothing."—G. C. BRADLEY.

[After reading the above our younger friends will perhaps refer to Genesis ii., 3, where they will read of God resting from all His work which He had created and made, and, if their Bibles have marginal readings, they will find in the margin, "created to make." The definition of the scholar will give them an intelligent meaning of this expression.—EDITOR.]

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

AUGUST.

MORNING SUBJECTS.		Golden Texts for Repetition.	
SUBJECT.	FOR READING.		
THIRD QUARTER.			
5	The Affliction of Israel...	Exod. v. 1—19....	Heb. xii. 11.
12	Promises of Deliverance	Exod. vi. 1—13....	Ps. l. 15.
19	The First Plague.....	Exod. vii. 14—25..	Jer. i. 19.
26	The Land of Egypt smitten	Exod. ix. 13—35...	Ps. cii. 15.

AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
5 Paul sent to Macedonia...	Acts xvi. 1—21...	2 Cor. ii. 14.
12 Paul and Silas in Prison	Acts xvi. 22—40...	Ps. xl. 3.
19 Thessalonians and Bereans	Acts xvii. 1—15...	ver. 11.
26 Paul at Athens.....	Acts xvii. 16—34..	1 Tim. ii. 5.

SEPTEMBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
2 The Final Plague	Exod. xi.	Heb. x. 31.
9 The Lord's Passover.....	Exod. xii. 1-14, 29-36	1 Cor. v. 7.
16 The Flight from Egypt...	Exod. xiii. 17 to xiv. 9	Ps. cvii. 14.
23 The Sea Divided.....	Exod. xiv. 10—31	Ps. ix. 16.
30 Moses' Song.....	Exod. xv. 1—21...	Ps. lvi. 16.

AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
2 Paul at Corinth	Acts xviii. 1—17 ...	Rom. xii. 11.
9 Paul at Ephesus.....	Acts xviii. 24 to xix. 12	Ephes. ii. 1.
16 Power of the Word.....	Acts xix. 13—28 ...	Heb. iv. 12.
23 Paul at Miletus	Acts xx. 17—38 ...	2 Cor. iv. 5.
30 Review of the Quarter's Lessons		Ephes. ii. 13.

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

By some means our Puzzle last month was not put in a very clear and distinct position. We are afraid it may be overlooked by some of our nephews and nieces. For this reason, and because the exercise is an unusually long one, we will continue it another month. We are further induced to do this by the consideration that the INSTRUCTOR, we fear, will not have been in the hands of our young friends much before the end of the month. Owing to the holding of our Conference in June, the punctual publication of the INSTRUCTOR for July is impracticable.

It is stated as a suggestive fact that the Saviour of the world has titles in the Bible answering to every letter of the alphabet. Our young readers will please give us as complete a list of these titles as they can collect.

We beg to call the attention of our correspondents to our change of address. All communications should be sent to

The Rev. JOHN HUDSTON,
8, St. Domingo Grove,
Liverpool.

We may add that the way many letters are sent shows that some of our young friends, and older ones too, are very inattentive to the directions given to correspondents. Many are sent addressed to 4, London House Yard. This occasions the necessity of reposting, and so a penny is wasted, except as it goes to the revenue of the Government. And, besides, there is the delay of the communication in reaching the editor, which frequently causes disappointment to the correspondent, as thereby the contribution is necessarily inserted a month later than it would be if sent direct.

LADYWOOD, BIRMINGHAM.—Presentation to the Superintendent.—On Saturday, June the 9th, the usual quarterly meeting of the teachers of the above school was held, but on this occasion the meeting had more than the usual interest attending it. After the business of the evening had been disposed of, a presentation was made by the teachers to Mr. John Price, who has been superintendent of the school for upwards of twenty years. The presentation, consisting of an album and Canon Farrar's "Life of Christ," was handed to Mr. Price by the Rev. Charles Leach, the pastor, who said that it was not to be looked upon as so much pay for service rendered, but that it was the sincere expression of hearts that had felt that the labour to which Mr. Price had given his life had been one of love, of a pure disinterestedness, and of a devoted energy to the Master's service. Mr. A. Taylor, Mr. Cox, Mr. Woodward, Mr. Wilde, and others, also testified as to the way in which Mr. Price managed the Sunday school, and the success which, under the blessing of God, had attended his efforts. Under all circumstances, "through thick and through thin," has Mr. Price held with a tenacious grasp to Sunday schools and to Sunday-school work. The rise of Ladywood Sunday school has been one of a steady growth. Twenty-five years ago the schoolroom was a very small dilapidated concern in a very poor neighbourhood, and the scholars attending "a mere handful." To-day the schoolroom is a large one, with a scholarship of four hundred. It is sincerely hoped that for many a long year its superintendent will be preserved, and that there will be accomplished in the name of Christ greater things than have already been achieved.—A. T., jun.

SHERIFF HILL, NEAR GATESHEAD.—On Sunday, May 27th, the anniversary of our Sunday school was celebrated. Our esteemed ministers, Revs. B. S. Chambers and A. Smith, conducted the services. The scholars repeated portions of Scripture, poetry, &c. Our collections were a trifle below last year. On the following day a tea and public meeting was held. Mr. J. Scett, the superintendent, presided. Several volumes were presented on behalf of the friends by Mr. Stratton to our much respected minister, Rev. A. Smith. They contained the following inscription:—"Presented to the Rev. A. Smith by the members and friends of the M. N. C. Chapel, Sheriff Hill, on his leaving

Gateshead, as a small mark of respect for his faithful and earnest services so willingly rendered on behalf of the above society." The Rev. A. Smith made a suitable reply. The children recited suitable pieces and sang suitable hymns. The meeting was addressed by Messrs. J. Alder, G. Brason, W. Black, and A. Stratton. The Rev. B. S. Chambers brought the meeting to a close with a very earnest and impressive speech. All seemed to feel its power. The only sorrowful part of the meeting was that this was the last time our ministers would meet with us in this way.

—A. STRATTON.

MOSELEY STREET, BIRMINGHAM.—On May 20 we held the anniversary of our juvenile missionary society. Mr. Godfree very efficiently presided. He spoke of the great good which even the youngest of us might do if we were possessed of the true missionary spirit. The report showed that there had been a decided success in many parts of the work during the year. Very appropriate addresses were given by Mr. E. Jones and Mr. E. R. Smith, our excellent school secretary. Two of our scholars gave recitations very effectively. William Hudson gave "The Missionary's Grave;" and Victor Wheeler, the "Missionary Address No. 2." One of our young friends, A. E. Cole, gave an address in a way which did him credit. Mr. Hetherington distributed the certificates gained by some of our scholars at the recent Sunday-School Union examinations. Appropriate hymns were sung at intervals, the choir and organist kindly giving their services. To our regret we were deprived of the presence of our beloved ministers through their engagement elsewhere. The school-class contributions to the missions we think call for special notice. Of the amount, £10 17s. 10½d., contributed, our elder boys' class has raised £5 4s. 10d. This is very creditable to them, and we trust they will never lose their love of the mission cause, but that it will grow with their growth, and strengthen with their strength. The energetic efforts of the scholars in collecting will be shown by the following list:—W. Russell, £2 5s.; Miss Fuller, £1 1s. 1½d.; Ada Northwood, £1; Anne Dewey, 16s. 6d.; A. E. Cole, 16s.; Miss Morley, 8s. 6d.; Miss Davies, 7s.; W. Hudson, 6s. 11d.; Miss Moore, 6s. 4d.; E. Morris, 6s.; Anne Wheeler, 2s. 8d.; small sums, 1s. 9½d.; total, £7 16s. 10d. By cards, Anne Turton, 4s. 6d.; Sarah Roper, 3s.; small sums, 1s. 8d. By private boxes, Mrs. Harris, 6s.; Master E. P. Jones, 6s. 5d.; Master Lines, 4s. 0½d.; Bertie Harris, 2s. 6d.; collection at the meeting, £1 12s. 4d.; total from all sources, £22 0s. 0½d.—W. G. ASTLE.

P.S.—From want of space we have been obliged to condense the account sent us from the above school.—EDITOR.

WILLINGTON, SPENNYMOOR.—The anniversary services of our Sunday school, Spennymoor, was held on Sunday, June 24th, in the Town Hall. The hall was well filled with people in the morning, was crowded in the afternoon, and so packed and overflowing in the evening that numbers who came to the doors were unable to find access. The Rev. E. Wainman presided over the services, which, after the usual devotional exercises, consisted principally in singing and recitations by the scholars. The recitations, which had been admirably selected, and were very well said, numbered upwards of fifty; and the hymns, numbering fourteen, all of which were appropriate, were sung, under the able conductorship of Mr. L. Winstone, with very happy effect. The collections amounted to £8.

The services proved a grand success, and too much cannot be said in praise of the talent and energy displayed by the conductor, Mr. L. Winstone, and his coadjutors in getting up such a treat of holy song as that enjoyed on this occasion.

MILES PLATTING, MANCHESTER.—On Sunday afternoon, May 6th, we held our quarterly juvenile missionary meeting. Our esteemed superintendent, Mr. B. Powell, presided. Suitable missionary hymns were sung by the children. The report for the year was read by the mission secretary, showing the following list of collectors for the year:—Miss M. A. Schofield, £1 3s. 4d.; Miss L. Purdy, £1 2s. 8½d.; Miss M. A. Smith, 15s. 8½d.; Miss J. Smith, 15s. 2d.; Miss E. A. Gravel, 6s. 5d.; Miss J. Pendleton, 4s. 6d.; Miss M. Longworth, 1s. (card); Mr. A. Burgess, £1 1s. 6½d.; Mr. J. Slinn, 2s. 6½d. (card); Mr. S. Johnson, 2s. 1d. (card). Total, £5 15s. 5d.; increase on last year of 17s. 8d. After the reading of the report our esteemed minister, Rev. J. Hughes, gave an eloquent address on behalf of the missions, and with a short address from Mr. J. Cordingly, a very successful meeting was brought to a close.—G. W., Secretary.

Memoirs.

PHILIP JAMES JACKSON

WAS born at Hurst, near Ashton-under-Lyne, January 15th, 1864. At a very early age he was sent to the Sabbath school, at which he was a regular and attentive scholar until the autumn of 1874. In the summer season of that year, whilst playing with his comrades, he injured his hip by an awkward leap; at first it was not thought that the accident was at all serious, but in the November following it became quite apparent that even if his life was spared he would be a cripple. He was now confined to his bed, and all that a mother's care and medical assistance could do to restore him proved to be in vain, for he gradually became worse, and abscesses having formed upon the injured part his life was literally drained away. His suffering was intense and long, but amidst all he was remarkably patient. Having pious parents he had from very childhood loved his Saviour, and in his affliction that Saviour became still more precious. Upon being asked by his mother if he ever prayed for help to bear his affliction, he answered, emphatically, "Oh, yes; I could not bear it at all if I did not." The words of Jesus were to him a source of joy. He called his Testament his "comfort," and often said it was a great comfort to him. When asked whether he wished to get better, he answered, "Yes, and if it is God's will I shall." Being young he desired to live, but when he knew that could not be he was fully resigned, and now his parents, particularly his mother, while doing all they could for his temporal good, gave yet more special attention to his spiritual welfare; every night before retiring to rest his mother might be seen by his bedside, Word of God in hand, helping her son to realise the deeper meaning of its precious truths, which, being done, they together presented their petitions at the throne of grace. Several days before he died he expressed a desire to go and be with Jesus. Observing his sister weeping, he said, "Don't weep, Sarah Ann, you don't want to see me lie here like

this. I shall look out for you in heaven." On Saturday, April 14, 1877, his life was hourly expected to close, and shortly before 10 p.m. on that day he fell asleep, and on the following Thursday was interred in the graveyard adjoining our chapel at Hurst, where his sorrowing friends left him "till the daybreak and the shadows flee away." D.J.

Poetry.

THE SISTERS.

UP in the nursery, the livelong day,
Two little sisters, busy at play—
Each little girl in her own cunning way.
Having such fun with their dolls and toys;
Both overflowing with childish joys;
Making the nursery ring with their noise.

The elder sister is slender and fair,
With golden curls of soft silken hair,
And her eyes are deep blue, of beauty rare.

With a dear little face that is full of fun,
She is up to mischief as soon as the sun,
Not resting until the long day is done.

The youngest sister is cute and small,
Rosy, chubby, and not very tall,
For she's only a baby after all;

With soft brown curls round her baby head,
With cheeks as bright as the roses are red,
And eyes that seem a soft light to shed.

Beautiful children they are, and fair,
Playing without a thought or care
Of the troubles of life or its hard wear.

Dear little sisters, through every day
In kindness and love together play;
Keep naughty passions and anger away.

For your baby hands are far too white,
And your baby hearts are far too light,
To do anything with them that is not right.

In spirit be gentle as the dove,
Loving each other with dearest love,
Which is the will of the Father above.

Cling closely together through weal and woe,
In all the troubles through which you must go;
For all will be ordered aright you know.

And then with love, when you're old and gray,
You'll think of the far off childish day
When you were wont together to play.



THE SEASIDE.

THE SEASIDE.



WE asked a boy of some twelve years of age, who had been spending a few weeks at the seaside, to write us a few lines about the picture we give this month. We confess we did it more in fun than in expectation that he would comply with our request. However, he took what we said seriously, and gave us the following—written we may say hurriedly and without any time for revision :—

“What pleasant thoughts the scene before us calls up ! To the old, the happy hours of enjoyment they had at the seaside when they were young, and all life, with its joys and sorrows, was before them. To the young, the pleasant times they, with their parents and friends, have enjoyed there, and hope to enjoy again.

“Who can view the sea without pleasure, from the oldest to the youngest ? There are many pleasures at the seaside. What pleasure there is in watching the advancing tide, and in seeing the little boats dance merrily along. Then there is the pleasure of digging in the sands, and making small lakes to swim our boats in, and of gathering seaweed and the pretty shells that are scattered all about on the beach.

“Among the many attractions of the seaside there is that of the bathing-place. How delightful it is to plunge into the sea and rush forward to meet the coming waves !

“Who that looks at the sea has not wished to sail upon it in some little fairy craft ; or to cross the broad ocean, in the mighty ship, to some far-off land ?

“How beautiful and sublime is the sea !

“Earth has not a plain
So boundless or so beautiful as thine ;
The eagle's vision cannot take it in :
The lightning's wing, too weak to sweep its space,
Sinks halfway o'er it, like a wearied bird.”

“Now the sea is quiet and calm, then it is tossed about and lashed into fury by the winds and waves. There are terrors on sea as well as on land. The fury of the storm, the raging of the elements, all contribute to a wild and terrible but still beautiful scene. How different from that which the picture suggests.”

Thus much for our young contributor. Though he took our request seriously we question whether he will not be greatly surprised to see

what he wrote in print. We hope he will not be proud of it. Before he is that, he must wait five years and then look at it again. He says the seaside recalls pleasant hours to the old spent there when they were young. Of some this is true, but not of so many. When those who are more aged were young the sea was not so accessible to those living at a distance from it as it now is. There were then no railways to bring people swiftly and cheaply from the centre to the circumference of our island. We ourselves were twenty years old before we were favoured with a sight of the sea. Children of the present day have sources of enjoyment which were altogether denied to their forefathers. Let us hope that they will be all the better and happier for them.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 44.

FROM BEN BARLOW TO DOCTOR BARLOW.

Waterside House,
Worcester, August 8th, 187—.

MY DEAR FATHER,—

I arrived here all safe about twelve, and found many of my schoolfellows already arrived; among them Ted Instone, who is well and jolly. We have three or four fresh fellows, and two of the old ones have left.

Ted and I are in the third class now; so, instead of having to sleep in our old room, we two have a little double-bedded room to ourselves. It is very jolly.

I was going to write you quite a nice long letter, and also one to Charlie Thornton, but Sam Belton, our captain, has just sent a boy to tell me he wants me to play cricket, so you will please excuse this short note.

With love to you, to mother, Clara, and Helen, and to Bob, and everybody else, I remain, yours, in great haste, BEN.

Letter No. 45.

FROM CHARLIE THORNTON TO BEN BARLOW.

High Street, Woodbourne,
August 15th, 187—.

MY DEAR BEN,—

Hurrah! I've got a situation! I told you when you were over

that father meant trying to get me in at Carson's tray manufactory at Tinbury. Well, Mr. Jones gave me a good character, and your father was so kind as to make a purpose journey to speak for me, and so I have got a place as junior in the office. I am to begin on Monday morning, and shall have wages at the rate of £12 a-year for the first six months, £15 a-year for the next half-year, then £20 the second year, and a regular advance of £5 a-year till my salary reaches £100 a-year! That is, of course, if I give satisfaction; and you may be sure I shall try hard.

Did I tell you that our school club had been challenged to play the Tinbury school? They have accepted the challenge, and the match will be played on Saturday week. Of course Tom Blunt is captain of the club now I have left school, but they will have me to take that post once more, and the Tinbury fellows have accepted my name as one of the players. We have a half-holiday at Carson's on Saturdays, so I can join in the match.

I expect I shall not now be able to write to you so often as formerly. My office hours will be from eight in the morning till seven at night, with half-an-hour for breakfast and an hour for dinner; so I shall not have a great deal of leisure, and then I shall make father's post-bag up for him every night, as I have been doing lately. But I hope you will not forget your old comrade though he may not be able to remind you of his existence quite so often as formerly.

Father and mother send their kind regards. Remember me to your friend Instone; a line from him would be very welcome if he hasn't forgotten us country clowns. I remain, yours very truly,

CHARLIE THORNTON.

Letter No. 46.

FROM BEN BARLOW to CHARLIE THORNTON.

Waterside House,

Worcester, August 16th, 187—.

MY DEAR CHARLIE,—

I am so glad you have got the situation you were wishing for, though I'm afraid you'll find it hard to be shut up in a musty office for so many hours a-day. However, you must make haste and learn the business, rise to be chief clerk, and marry your master's daughter, like the hero in a tale Ted lent me last night.

You may be sure I shan't forget you, old fellow, even if you can't write so often as you used to do. I'll try and get more regular in correspondence in proportion as you become irregular.

I say, Charlie, shouldn't I just like to come and watch that match with the Tinbury school! Of course you would not have time—but can't you get somebody else to send me a good account of it? Ted Instone is as eager as I am to know who makes the runs.

I am getting on well with our club here. Yesterday the captain

let me have my innings *with him*. He says I'm a steady, careful player.

But I must leave off. I have harder lessons now I'm in the third class, and must get to them at once. My friend Ted, who sends his love, has been at his a quarter-of-an-hour already. So good-bye, Charlie!

Give my love to your father and mother, and believe me, as ever,
your old schoolfellow, BEN.

Letter No. 47.

FROM JOE BLAND TO BEN BARLOW.

Woodbourne Rectory,

Sept. 6th, 187—.

DEAR BEN,—

Charlie Thornton has asked me to give you an account of the cricket match played between our club and the Tinbury School Club this day week. He says you are anxious to hear all you can about it.

I had hoped to be able to send you a printed account of the match, but our miserable local newspaper has not sufficient enterprise to publish such things.

As secretary of our club I wrote out a report, and sent it to the *Tinbury Mercury*, and directly the paper came this morning I opened it to see my report, but, strange to say, for some reason or other they had inserted nothing more than the score of the match. It was stupid of them, and I was very vexed, because I took special trouble to make the report interesting.

I had kept a copy of what I wrote, so I send it herewith for yourself and your friend. I also send you a copy of the *Mercury* containing the score.

With kind regards to you both, I am, yours truly, JOE BLAND.

P.S.—Father has just popped in and read the report. He seems very much amused at something in it, and says he doesn't wonder at the *Mercury* folks not printing it.

[Copy of the Report sent to the *Tinbury Mercury*.]

Cricket Match at Woodbourne.

Woodbourne School *versus* Tinbury School.

THIS long-expected match was played on Woodbourne Common on Saturday afternoon, August 30th, and was witnessed by a large concourse of spectators. The weather was delightful. The sun shone brightly, but not so fiercely as to distress the players, and the ground was in good condition.

The Tinbury School Club, as challengers, had the first innings, so the Woodbourne boys had to take the field. Charles Thornton

(late captain of the club, and playing with it on this occasion by special arrangement) bowled, and Thomas Blunt (present captain) took the wickets, the other players occupying the remaining posts.

At two o'clock play was commenced, the Tinbury Captain sending two of his best "men"—Wilkins and Brown—to the wickets. With one look round the field to see that all were in their places, and with a few final directions to his "men," Thornton sent a quiet, uncertain ball to test the skill of the player, and, if possible, to discover his weak points. Wilkins hit the ball fairly, but it was promptly stopped by John Williams, the "mid-wicket."

Thornton next tried one of his swiftest throws, but the player dexterously turned it off to "leg," where, however, it was again stopped before any runs could be scored. Two or three other balls followed, for one of which two runs were made, but in the next "over" Thornton resolved to try his notorious "slow-twisters." These came gently springing over the turf till within a few feet of the wickets, when they generally leaped up higher than anyone could expect. Brown and Wilkins were evidently puzzled, but they managed for three "overs" to keep the balls off their wickets; but at last Wilkins, gaining confidence, struck at one with all his might, when it at once cheated his calculation, leaped over his bat, and sent his "balls" flying.

Brown soon shared his companion's fate, and the other Tinbury fellows fared much the same, getting an occasional run, but being, eventually, bowled out. In a little over an hour Thornton had the pleasure of seeing the last of the eleven retire, the Tinbury Club having made a score of only fifty-eight runs.

There was a pause of about ten minutes before the Woodbourne boys went in, during which time the players and the spectators regaled themselves with buns and ginger-beer, which an enterprising old woman had brought on the ground. She drove a brisk trade, and soon had to fetch a fresh stock.

John Williams and Fred Higgins were the first to take the bats on behalf of Woodbourne School. Some of the boys wanted Thornton to go in first, but he knew better play than that. He had been hard at work bowling, and meant to rest himself before his innings, and he, of course, knew his opponents would be tiring themselves somewhat in the meantime.

The bowling on the part of the Tinbury eleven was very irregular. Brown, who first took the ball, seemed scarcely to know what sort of balls to send, for there were hardly two alike. This, of course, bothered the bats somewhat, but it had the good effect of making them play cautiously. They accordingly watched each ball eagerly, and took advantage of its peculiarities. The swift straight balls they "blocked" or "slipped"; the crooked, wavering balls were driven to all parts of the field; and the springing, dancing balls were knocked right over the heads of the farthest fielders.

But though the balls were played with such skill, Williams and

Higgins found they were not making many runs, for the fielding of the Tinbury Club was as good as its batting had been indifferent, and no balls were missed except those that went over their heads. This naturally tempted the players to hit the balls up.

The Woodbourne captain, who was reclining at full length under a hawthorn bush watching the game, saw the danger attending such random play, and he accordingly sent a boy to tell the players not to hit up if they could help it. But it was too late. While the boy was waiting for the finish of the "over" to allow of his conveying the message, John Williams sent a regular "sky-flier," and was at once caught out by Wilkins.

George Wasdell took Williams' place. Higgins was run out, and Edgar Foster took his bat. Two other changes were made, and still there were no runs worth speaking about. The captain of the Woodbourne Club began to look serious. When the next man got out, he took his bat and went to the wicket to see what he could do towards turning the tide in their favour. As he went in Birch took the place of Brown as bowler, and calling his men together urged them to be active and alert, as he knew the real work of the game was now about to begin.

The Woodbourne boys, who had been lounging about in every variety of posture, now assumed an appearance of greater interest. Up to this time they had contented themselves with lazily criticising the play of the various boys, cheering a good hit, or hissing an awkward blow. Of course there were dozens of boys quite prepared to show how the misfortunes of the various players might have been escaped. Indeed, some of the boys, who felt themselves neglected because they were not included in the eleven, hinted that if they had been playing the score would have looked very different. If a person, ignorant of the game had listened to their observations, he might have thought the eleven players were the merest novices, and that their critics were professors complacently patronising them.

Thornton played at first very quietly, and attempted no runs, but after awhile he warmed to the work, and getting now two runs, and then three, he quickly raised the score. Seeing that the "long-slip" was not a very quick fielder, he sent a few balls in that direction. The other captain noticing this, sent a good man from "leg" to that position. Forthwith Thornton changed his play, and sent the balls spinning away to leg, thereby getting three and four runs frequently.

Once there came a very pretty ball, and Thornton, notwithstanding his better judgment, could not resist the inclination to hit it up. Accordingly he gave it a tip, and up it went yards above their heads. Three fielders started off to catch it, but as they knew that would result in a regular scramble, two of them stopped and left it for the nearest fielder. As the ball began its descent the excitement grew intense. Thornton and his fellow-bat forgot to run in their anxiety to know their fate, and the spectators watched the ball with breathless interest. Perhaps the ball came down too heavy, or else the

fielder got nervous at the thought of his responsibility, for somehow, after getting it in his hands, he managed to let it slip to the ground. Cheers and hisses were freely awarded to the unfortunate fielder by the friends of the respective parties, and he was called "butter-fingers," was asked if he found the ball hot, with much more banter of the same sort.

Thornton played more cautiously after this adventure. Time after time he saw his partner bowled, stumped, or caught out, but still he played on, making up as well as he could for the poor play of his fellows. At length the last player—Tom Blunt—went to the wicket, and there were still six runs to be made to equal the Tinbury score. Thornton had reserved Blunt until the last, because of his careful playing, and he whispered him to mind what he was about.

Every hit now was of importance, and the spectators shouted advice and encouragement continually. "That's it, Charlie, hit 'em down!" "Well hit, Thornton; run three while you are at it!" "Don't stop running, Blunt!" and such like cries were heard every few minutes from one or another. But disregarding this rather too plentiful advice, and carefully avoiding the risk of running each other out, Thornton and Blunt worked together vigorously and unweariedly.

At length enough runs were got to secure the victory for Woodbourne, and then, when there was no longer any risk of losing the game, Thornton set to work in slashing style. He hit the balls in every direction up and down, and gave them such knocks as sent them right out of bounds. Blunt also did good execution. Four runs and five were frequent, and from sixty the score rapidly rose to nearly a hundred; when at last Blunt took too long an aim at a ball, missed it, and lost his wicket. Of course Thornton carried out his bat, amidst the cheers and congratulations of all the spectators.

Thus ended a contest which will long live in the memory of those who witnessed it as a well-fought match. It is pleasing to be able to add that not a single dispute arose throughout the match, and there was, therefore, little for the umpires—Mr. Jones and Mr. Robinson, masters of the respective schools—to decide.

ADDRESSES FOR JUVENILE MISSIONARY MEETINGS.

III.

IN pleading to-night for the Mission'ry cause,
I want to solicit the aid
Of three well-to-do brothers—they're present, I hope,
And to show themselves won't be afraid.

The first is a highly respectable gent,
 Though not big he has wonderful power,
 And he often can do in a minute or two
 What his brothers can't do in an hour.

But though powerful, I question if he does as much
 For our cause as his weaker relations,
 Since either from modesty, shyness, or pride
 He's seen rarely on public occasions.

And yet he need not be so bashful, I'm sure ;
 He's good looking enough to be bold ;
 His figure is neat, his complexion is rich,
 His name you have guessed—Mr. Gold.

The next one is paler, but useful and strong ;
 He is comely and honest and bright ;
 He is active and busy, and bustling about
 From morning till late in the night.

Not bashful or timid, he always attends
 Public meetings like this, he's so bold ;
 And perhaps he does more to help every good work
 Than his much stronger brother named Gold.

Wherever he goes, he rings out so clear,
 His voice never yet became hoarse ;
 He cheers up the heart that's beginning to fear,
 His name's Mr. Silver, of course.

The third brother is darker, in fact he's quite brown,
 The less said of his colour the better ;
 But if dirty, he's useful, and oft every day
 For small services we are his debtor.

His friends are quite vulgar. 'Tis seldom he meets
 Mr. Gold—he hardly would know him ;
 He is better acquainted with Silver, 'tis true,
 But he owns that in rank he's below him.

Mr. Gold's house is strong, its walls are of iron ;
 Mr. Silver's is neat, safe, and pleasant ;
 But their poor brother—Copper—just tumbles about
 Into any place just for the present.

But though vulgar and rough Mr. Copper may be,
 He always turns up at our meeting ;
 And though weak, we accept of such help as he gives,
 And give him a welcoming greeting.

* * * *

And now, Mr. Gold, our missions need *you*,
 Turn out in these times of bad trade ;
 Your brethren perhaps lack their usual force,
 Make up for this lack by *your* aid.

Mr. Silver, I knew we are sure of *your* help ;
 But to-night pray do strain every nerve ;
 Perhaps you are bigger and heavier since last
 We the Mission cause met here to serve.

Mr. Copper, *your* brown open face we shall see
 No doubt, and we welcome *you* too ;
 But be modest, and don't be too forward and hide
 Your betters, as sometimes you do.

My dear friends, we shall presently come with the plates
 To collect what you're able to spare
 For our Missions abroad ; and we hope there will be
 From each of these brothers a share.

They are in the pews with you, and if they are shy,
 (Mr. Gold very likely may be),
 Pray take them out firmly, you can if you'll try,
 And at once hand them over to me.

TOM BROWN.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XIX.—THE DOG.



HE dog has received the high honour of being styled the "friend of man." Though not the first of animals in respect to his physical structure, there has certainly been developed in him the completest moral sense, and he has been admitted to human habitations on terms of familiarity and confidence not extended to any other four-footed creature.

The services we receive from dogs are as various and as numerous as their species. The mastiff and the bull-dog protect our property with an honest faithfulness absolutely incorruptible, and their teeth are as much dreaded by thieves as shots from a pistol. The shepherd-dog guards at the same time that he leads and disciplines the flock. The Newfoundland dog has saved many a one from a watery grave, and the St. Bernard has rescued innumerable travellers who have succumbed to the intense cold. Of the dogs employed for purposes of sport there are many varieties. The terrier has very short legs, by which he is enabled to creep under thick bushes and shrubs, and the greyhound has a sharp head and slender body to prevent as little opposition as possible to the air in his swift motion through it. His legs are long and spare, and enable him to

distance the swiftest horse and make a good race with the hare itself, whose safety depends almost as much on her stratagem as on her flight. The greyhound and the terrier afford a contrast in another respect. A powerful vision would be of but little use to the terrier as he crawls through the thick grass or underwood, and accordingly his sight does not reach far ; but his sense of smell is perfectly wonderful, and by it he can trace the animal he follows if no impressions are left on the ground. The greyhound on the other hand has a scent that is but feeble, but a sight so keen that it can see and distinguish its prey at a great distance. The setter stops and crouches down when he perceives the game, and thus gives the sportsman timely notice ; while the retriever will bound quickly along and bring and lay at his feet the birds he has shot, or fetch them out if they have fallen into a river.

There are many other varieties of dogs, but they all seem anxious to render service to their masters, to whom they become strongly attached. Of the usefulness of the many varieties, Burchell gives us a lively idea in his "Travels in Africa." "Our pack of dogs," says he, "consisted of about five and twenty of various sorts and sizes. This variety, though not altogether intentional, as I was obliged to take any that could be procured, was of the greatest service in such an expedition, as I observed that some gave notice of danger in one way, and some in another. Some were more disposed to watch against men, and others against wild beasts ; some discovered an enemy by their quickness of hearing, others by that of scent ; some were useful for their vigilance and barking alone ; others for their speed in pursuing game ; and others for their courage in holding ferocious animals at bay. So large a pack were not, indeed, maintained without adding greatly to our care and trouble in supplying them with meat and water, for it was sometimes difficult to procure for them enough of the latter ; but their services were invaluable, often contributing to our safety, and always to our ease, by their constant vigilance, as we felt a confidence that no danger could approach us at night without being announced by their barking. No circumstance could render the value and fidelity of these animals so conspicuous and sensible as a journey through regions which, abounding in wild beasts of every class, gave continual opportunities of witnessing the strong contrasts in their habits between the ferocious beasts of prey which fly at the approach of man, and these kind but too often injured companions of the human race. Many times when we have been travelling over plains where those have fled the moment we appeared in sight, have I turned my eyes towards my dogs to admire their attachment, and have felt a grateful affection towards them for preferring our society to the liberty of other quadrupeds. Often in the middle of the night, when all my people have been fast asleep around the fire, have I stood to contemplate these faithful animals lying by their side, and have learnt to esteem them for their social esteem of mankind. When wandering over pathless deserts, oppressed

with vexation and distress at the conduct of my own men, I have turned to these as my only friends, and have felt how much inferior to them were men when actuated only by selfish views.

The dog is capable of education in a very remarkable degree. Their education indeed constitutes the main difference among them, for all untrained dogs are worthless rascals, being even more troublesome than spoiled children. The dog is generally spoken of in the Bible in terms of contempt or obloquy. "Is thy servant a dog that he should do this thing?" "Without are dogs." But it must be remembered that in the East dogs are unclaimed and run completely wild, and live on the garbage and refuse of the towns and cities. In many populous places they are the only scavengers, and were it not for their services many cities would be visited with terrible pestilences that must necessarily arise from the defective sanitary arrangements. But though such services are invaluable, there never grow up the intimacy and strong attachment between individual dogs and their masters common in more northern latitudes. That they are not natural vagabonds delighting in immunity from all restraint is seen in the readiness with which they attach themselves to man, and the way in which under his control their abilities improve and their happiness increase. It is, indeed, a singular but a well-ascertained fact that dogs copy the manners of their owners. Dogs kept by vicious men are invariably vicious themselves, whereas those owned by persons of mild and benovolent temper are generally of an amiable character.

In illustration of the sagacity of the dog whole volumes have been written, and there seems no limit to the number of well-attested instances of his affection and cleverness. And yet though there is unquestionably a kind of reason capable of being developed by him, it is not the kind of reason that man possesses. If you tie a rag on the out finger of a child, you may persuade him that it is for his interest for it to be allowed to remain there. But if you put a plaister on the wounded leg of a dog, he will do his best to tear it off, and neither whipping nor caresses will persuade him to let it alone until he has demonstrated to his own satisfaction that it is absolutely out of his power to disturb it. The mind of a dog—if one may properly use the word—seems more fertile in ideas than that of any other animal, and his ideas are put to more original and more practical uses; but there is a wide gulf between him and man that no instances of canine cleverness can ever possibly lessen. The spider is a very clever weaver, and the swallow is a very excellent builder; but if they had the skill of the human mason or weaver we should see variety and individuality in their work, and stages of progress that varied with different years. In like manner the sagacity of the dog is very wonderful, but it is only in a very small circle that his mind moves; he is compelled to begin at the beginning, and cannot by any means avail himself of the wisdom and knowledge of his ancestors, or, like his human master, begin where those who lived before him left off. The cleverest dogs nowadays do much the same things as clever dogs did a thousand years ago;

whereas the principle of reason in man is ever productive of fresh endeavours and wider ambitions, and causes him constantly to strike fresh paths, and reach hitherto undreamed-of achievements.

Dogs were formerly broken to a kind of light harness and employed to draw little carts containing fruit, vegetables, &c. But brutal men frequently loaded them with heavy loads, which they were compelled to pull along the hard pavements of the street; and there were thus inflicted upon the poor creatures such sufferings that the practice was put down by Act of Parliament. They are still used in small light carts in Belgium and France, and when treated with kindness are none the worse for their occupation. Nothing gives the dog greater pleasure than to be of service to his master, and a word or smile of approval is to him a great reward.

Every one's memory is the repository of so many anecdotes of the cleverness of the dog that none need here be repeated. Not only should we adore the wisdom of God in the creation of this faithful and affectionate animal, but our hearts should be filled with thankfulness that so versatile and unmercenary a friend is placed at our service. The dog draws nearer to man than any other animal, and the friendship is capable of improving the character of both master and servant. None can be perfectly friendless who has a faithful dog; of such an animal it may be said that he possesses—

“ Many a good
And useful quality, and virtue too :
Fidelity that neither bribe nor threat
Can move or warp ; and gratitude for small
And trivial favours lasting as the life,
And glistening even in the dying eye.”

TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CHAPTER XIV.—A VILE TEMPTER.



FOR some days Barker was unable to take his place in the shop and had therefore to be employed in other work. For several evenings he and Foster stayed at home until the injured face wore a more presentable appearance. During these evenings Foster was led somehow to think of his mother and her unused Testament. He remembered how he loved and frequently read this book before his friendship with Barker had grown so strong. As he thought of his conduct he was ashamed. But that which caused most anxiety just

now was the barefaced lie he had told to the manager. If they should be found out he felt sure that their offence would be very much aggravated in the eyes of the master as well as the manager by the untruth they had agreed to tell. In spite of himself he had a dismal foreboding of some calamity. He grew miserable.

A few days later Barker was better, and so much improved that he could resume his work in the shop and go out in the evening. This he was glad to do. The first night on which he and his companion went out together was that which preceded the day of the race, to which he looked anxiously.

The morning before the race day the manager received a letter from Mr. Trueman, saying that he could not possibly get home for a few days more, but hoped the young men were all right.

Late the same night Mr. Earnest informed the manager that he had been in a betting house with the two young men. He said that Barker had made a further bet of two pounds upon the same horse which he had previously backed.

In the after part of the next day both master and manager knew that the favourite horse had neither come first nor taken "a place;" that is, it was neither first, second, nor third, and therefore their assistant had lost his bets. Barker knew that he had lost, but did not seem to be so much troubled as one would expect.

About 5 o'clock in the afternoon of the next day, when the assistants from the shop were at tea, Barker alone being in charge of the shop, he passed into the office to Foster. He was engaged on a number of letters. They began a conversation about Barker's loss. If a third party had entered the office and been told that one of them had had a serious loss, but had been left to guess which was the loser, he would most certainly have thought, had he judged from their looks, that Foster was the unfortunate one.

Barker treated it somewhat lightly and told Foster not to disturb himself, "for," said he, "I shall be all right again in a few days. I expect a little cash from our old boy (meaning his father) which will set me going again."

"I am glad to hear that," said Foster, "and I think you are a lucky fellow to have such a good father, who seems always ready to send you cash whenever you want it."

"He's a good sort," said Barker, "but until he sends I shall be fast enough. I have just been thinking of a plan by which I can have a little money until he writes me."

"And what is it, pray?" asked his companion.

"Well, it is a very simple and easy one, and I might as well out with it at once. I want you to lend me £5 until I hear from home. I expect to have a letter in about five or six days and I can repay you then." At this proposal Foster burst into a laugh and said:

"You know that all the money I have is 23s. If that will do you any good you can have it and welcome."

"But," said Barker, looking rather cunningly into Foster's face

as he spoke, "you can lend me the £5 quite easily if you will."

"Well," said Foster, not a little puzzled to understand him, "if you will just show me how I can, you know that I shall be happy to do so." Barker went a little closer to his companion, and taking hold of his arm with one hand and with the other pointing to the cash-box which at that moment lay on the desk, he placed his mouth close to his ear and whispered something into it.

Foster stood for a minute quite speechless, turned deadly pale, and let the pen fall from his hand.

CHAPTER XV.—AN IMPORTANT DISCOVERY AND SHAMEFUL ROBBERY.

When Foster was quite sure that he did not misunderstand the meaning of his companion's words, he looked him in the face and said: "I am very sorry that you should ask me to do such a thing. From the first day that I can remember anything until this, I have never stolen a penny from any one, nor anything worth a penny. I cannot now become a thief."

"Don't make such a fuss and look so very serious," said Barker. "I should be very sorry to ask you to steal anything for me. If it came to a question of stealing, I could do that myself without asking you to do it for me. I simply ask you to *lend* me £5 for a few days. In a word, will you, or will you not?"

"If the money were my own, I would not hesitate for a moment, but I cannot lend you this. Were I to do so I should feel that I had stolen it. If Mr. Trueman knew that we were appropriating his cash he would dismiss us in a moment."

"But how in the world is Mr. Trueman or anyone else to know?" asked Barker. "In less than a week I shall pay you the money back. Will you do it? Yes or no, in a moment."

Foster hesitated. He knew that he was already in Barker's power. The lie he had told to the manager was now before him. He was afraid to grieve his companion lest somehow he should bring trouble. But at the same time he could not bear the thought of using his master's money. He knew himself to be bad enough, but up to this point he had been strictly honest.

When Barker saw that his companion was giving way, he helped the matter forward by saying:

"You know very well that I would not ask you for it if I thought it would get you into the least trouble. I am sure to refund you in a week at the latest." Further conversation ensued, then with a trembling hand Foster for the first time in his life took his employer's money and gave it to Barker; he, pocketing the money, called him a good fellow, and saying that should he ever need it, he would do as much for him, left the office.

Poor Foster. His heart was sad. He little knew what he had done. He could not foresee all the trouble that he was making for himself, or rather that Barker was leading him into. That gentleman had made him *first a drunkard, then a deceiver, now a thief*. With a heavy heart he left the office and went to tea.

He had scarcely closed the door behind him when Mr. Samson entered the office from an inner door leading from a private office set apart for the manager's own use. Access to this inner room could be had through another door, beside that which communicated with the clerk's office. When the bell rang for tea, Mr. Samson was busy with a paper which he did not choose to leave at the moment. When he had finished and was about to pass out, he saw Barker enter the adjoining office, and heard him begin the conversation we have just described. It is not necessary to tell the reader that the young men were not aware of his presence in the office. But there he was all the while, and heard every word that was spoken, except the few which Barker whispered in his companion's ear, and these he was able to guess from what followed. He felt half inclined to send for a policeman and have Barker taken. This could not be done without Foster being taken too. He restrained his indignation and determined to wait the master's return. Taking one look through the window at Barker, whom he felt to loathe and hate, he went back through his own office and passed out.

That night Mr. Samson wrote to ask the master to come home as speedily as possible, as several things had turned up in his absence which required his immediate attention. In a few brief sentences he indicated that he had made several important discoveries affecting the matter upon which they last conversed together, on the night previous to his departure.

When Barker had been in the shop a few minutes after getting the cash, there entered a boy to pay a small account amounting to about £5.

"Sit down," said Barker to the boy, as he took the money and the note from him and passed towards the office. It was Foster's business to take money and settle bills which came in this manner. He had not yet returned from tea. Barker placed the cash and note upon the desk, and turned to go back into the shop. He closed the office door; turning again, he reopened it and passed in as if he had forgotten something. For a moment he stood looking at the cash and note which lay just where he had placed them. What he was thinking may be guessed from what follows: Suddenly seizing a pen, he placed a receipt stamp upon the note and settled it, using Foster's name and imitating his writing, which he was well able to do. He put the cash in his pocket, closed the office door, went back into the shop, and sent off the youth with the settled bill bearing Foster's name.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

IX.—PRODUCTS OF SKILLED LABOUR.—SILK, No. I.

HISTORY OF SILK.



SILK, and the many textures wrought from this beautiful material, are so universally and familiarly known that its history and peculiar manner of production cannot fail to be a subject of interesting investigation. Silk is worn or used by almost every one. It is woven into robes for the sovereign upon the throne; and there is scarcely a person in the civilised world who does not possess some article of silk.

All that can be collected concerning several of the fine arts of life is, that they have flowed to us from the East, and that many among them have issued from China in a state of comparative perfectness. This is particularly the case with the subject of our present inquiry. Every attempt to trace the history of the use of silk as an article of clothing leads us to the north of China. To fix the date when its use was first discovered is impossible. There are reasons which render it probable that the inhabitants of China enjoyed the use of silk from a period greatly anterior to its introduction elsewhere. By the written records of that country we are told that the art of converting to their own advantage the labours of the silkworm was known and practised among them 2700 years before the commencement of the Christian era. Silk would reach Syria and Egypt, by way of India, both in its raw state and as woven into garments. In its progress from China to Western Asia it has been traced through India, Assyria, and Persia in its manufactured state, until it reached the land of the Pharaohs. Thence it found its way into Greece, and ultimately to the nations of Western Europe bordering on the great sea. It is clear that the *fabric* was known long before the nations of the West were acquainted with the *source* whence the thread was obtained. Some imagined that it was the entrails of a spider. Virgil speaks of the Seres, "Who draw the tender threads from leaves." The mode of producing and manufacturing this precious material was not known in Europe until long after the Christian era, being first learned, about the year 550, by two monks, who procured in India the eggs of the silkworm moth, with which, concealing them in hollow canes, they hastened to Constantinople, where the moths speedily multiplied, and were subsequently introduced into Italy, of which country silk was long a peculiar and staple commodity. According to Thuanus the first introduction of the silkworm into France was during the reign of Francis I. During a long period silk

remained extremely costly. There was a time when it was of the same value as gold—weight for weight. During this time it could of course only be obtained by the very wealthy. In England, so recently as the sixteenth century, its general use was not only prevented by its costliness but by law. In the year 1554, during the reign of the arbitrary and tyrannical Mary, a law was made, the declared object of which was the encouragement of home manufactures, and to restrain the growing vanity of the lower classes of the people. This statute enacts, "That whoever shall wear silk in or upon his or her hat, bonnet, or girdle, scabbard, hose, shoes, or spur leather, shall be imprisoned during three months and forfeit ten pounds," excepting from this restraint magistrates of corporations and all other persons of still higher condition. In the first year of the reign of James I. this absurd statute was repealed. We gather from it that the manufacture of silk was then but of little importance in this country. It was developed, however, a few years after. In the year 1585 the city of Antwerp having been taken by the Duke of Parma, the Governor of the Spanish Netherlands, it was consigned during three days to indiscriminate plunder and destruction. Its ruin was a death-blow to the commerce of the Low Countries, and the noble manufactures of Flanders and Brabant were dispersed into various countries. About one-third of the artisans and merchants who wrought and dealt in silk took refuge in England, where they finally settled and taught those arts by which they had long prospered in their native land. By these means the manufacture was very materially improved in England, and became one of national importance.

Although the manufacture had now become fairly naturalised in England, it was restricted by our ignorance of the first process to which the silk was subjected. Up till 1718, the whole of the silk used in England, for whatever purpose, was imported "thrown"—that is, formed into threads of various kinds and twists. A young Englishman named John Lombe, the youngest of three brothers, impressed with the idea that our dependence on other countries for a supply of thrown silk prevented us from reaping the full benefit of the manufacture, and from competing with foreign traders, conceived the project of visiting Italy to discover how the silks were made there. He accordingly went over to Piedmont in 1715, but found the difficulties greater than he had anticipated. He applied for admittance at several factories, but was told that an examination of the machinery was strictly prohibited. At last, it is to be lamented, the brothers resorted to deceit and falsehood by bribing a priest, and telling the Italians John Lombe was a poor lad in want of employment, and he was engaged to work at the mill. He slept there, and, providing himself with matches and a dark lantern, he took drawings during the night of every part of the machinery. He made a hole under his bed, and kept the drawings there all day, and every night when all was still he worked hard. At last his work was finished, and he escaped; first, however, sending his drawings home

to his brothers. On his return home Lombe lost no time in practising the art of "throwing" silk. On a swampy island in the river Derwent, at Derby, he and his brothers built a magnificent mill, yet standing, called the "Old Silk Mill." Its erection occupied four years, being completed in 1725, at a cost of £30,000. It was five storeys in height, and an eighth of a mile in length. The grand machinery numbered no fewer than 13,384 wheels. It was said that it could produce 818,504,960 yards of organzine silk thread daily; but the estimate is no doubt exaggerated.

While the mill was building, Lombe, in order to save time and earn money to carry on the works, opened a manufactory in the Town Hall of Derby. His machinery more than fulfilled his expectations, and enabled him to sell thrown silk at much lower prices than were charged by the Italians. A thriving trade was thus established, and England relieved from all dependence on other countries for "thrown" silk.

Before Lombe had well got away from Italy, his plot was discovered, and the Italians conceived a bitter hatred against him for having broken in upon their monopoly and diminished their trade. In revenge, therefore, they determined his destruction. An Italian woman was sent over to England to carry out their wicked design. She obtained employment in the factory, and gained over to her side an Italian who was assisting Lombe. A slow poison was prepared by them and administered in small doses to him, from the effects of which he died at the early age of twenty-nine.

Thus much upon the history of silk; in our next we shall treat upon its culture and manufacture.

OUR SUNDAY-SCHOOL ALBUM.

BY ENOCH GRATTON.

(Continued from page 215.)

XX.—MR. NABAL CROKER.



DO not feel at liberty to decline any "cartes" which may be offered to me, or probably I should have refused to allow this one a place in our Sunday-School Album. The Sunday school is or ought to be one of the sweetest and sunniest spots on earth, and, therefore, we wonder that Mr. Croker should either have wished or dared to enter there. If he had only rightly thought of the place, or the purpose for which the teachers met, or the presence of so many buoyant and happy children, he would have kept away altogether, or he would have left behind him his cross looks and cantankerous humours,

and would have brought with him a cheerful face and a contented soul. Coming, however, in the mood he often did he might have frequently heard a voice saying to him in tones of surprise and sadness, "What dost *thou* HERE? Is Saul also among the prophets? Is Nabal also among the teachers?" Mr. Croker was tolerably well known in other spheres. In business, he was one of those men who are very quiet about good trade and easy times, but who are loud in their complaints about bad trade and hard times. In social circles he was never more in earnest than when tearing to pieces a fair reputation and putting a wrong construction upon a good action. Only let him meet with his old cronies, Mr. Wryface, Mr. Moody, and Mr. Darkside, and he becomes almost eloquent in his complaints.

"Ever complaining, nothing is right;
Daylight is dreary, wearisome night;
Ever rejecting, quick to destroy
The little that is left for our life to enjoy."

But it was in the Sunday school that the influence of Nabal was most disastrous. He was the dead fly in the pot of ointment. Either the rules were not rightly framed, or they were not rightly enforced. Now there was too much money required, then that which had been given was not being properly expended. At one time our friend complained that the minister took no interest in the school, indeed, was *rarely seen* in the school; then the complaint was that the minister was meddling with everything, and it would be just as well if he would mind his own business. To Mr. Croker everything and everybody seemed to be wrong because he himself was wrong. He was usually out of sorts and at loggerheads with himself. His appetite was bad, there was a bad taste in his mouth, so that the sweetest and healthiest food rarely tasted good to him. He had an affliction in his ears, and the finest music was harsh and discordant.

In a grand old book we have read repeatedly an interesting story of one of our friend's remote ancestors, and have been struck with points of resemblance between the two men. In this story we are told of a brave and generous young man named David, who had gathered around him a band of devoted friends and followers. They were in a wilderness and in urgent want of food. Near to them was a man of princely wealth, "the man was very great, he had 3000 sheep and 1000 goats." This man had a noble lady for his wife, "a woman of good understanding and beautiful countenance;" but the man himself was churlish and evil in his doings; and when David sent his young men to this churlish lord with the following respectful and graceful salutation: "Peace be both to thee, and peace be to thine house, and peace be to all that thou hast," my lord Nabal "railed" on the young men, and said in scornful tones, "Who is David?" and who is the son of Jesse? There be many servants nowadays that break away every man from his master."

Such men as Nabal do a lot of harm in the world. They throw

gloomy shadows over happy homes. They chill the ardour of sensitive and aspiring souls. They dishearten noble workers in the Sunday school and church.

The best thing our friend Croker could do would be to take the 13th chapter of the 1st Epistle to the Corinthians, and read it every day for *ten years*; not only read it, but feed upon it, absorb it into his veins, interweave it with all the fibres of his soul until he is full of the charity "which suffereth long and his kind, which thinketh no evil, beareth all things, believeth all things, hopeth all things, endureth all things."

XXI.—MR. JOHN WINSOME.

Did you ever see two faces more unlike each other than these two? Just look at them. The one is sour, crabbed, gloomy. The other is beaming, open, winning. This attracts, that repels. These clear kindly eyes see a soul of good in evil things; those see little good in most excellent deeds. The influence of Mr. Croker is like the east wind—

"Cold, dry, dusty, harsh, raw, and gusty,
The wind from the east is a troublesome beast,
Which makes most people crusty."

The influence of Mr. Winsome is like the warm, fostering breath of summer calling up beauty, joy, and abundance all around. I am pretty well acquainted with a Sunday school which was put under the superintendence of John when it had been almost wrecked by a member of the Croker family; in two months signs of life and fertility were seen, and in two years it was quite another place. It was no more like its former self than the poor haggard-looking bulb is like the bright beautiful flower which springs from it.

The success of this Sunday school was not due to John's efforts alone. Others laboured very devotedly, but Mr. Winsome was the guide and centre. He was a real magnet, drawing around him in loving fellowship and zealous ardour young and old. This he did, not by his superior culture and social eminence, but by the force of pure goodness. If ever I met with a radiant, tender, generous soul, it was John. He was a sterling Christian; and though not brought up in our own community he was truly attached to us, and freely sacrificed time, money, and strength to promote the prosperity of our Sunday schools and churches. His special sphere seemed to be among the young. With them he was quite at home, whether in the Sabbath class, the home, the sanctuary, the class meeting, or in their seasons of pleasure and recreation. Though he could not be called a young man, his heart was fresh and tender. There still rested on him "the dews of youth," pure and glittering in the light of God's countenance.

Some who look upon this likeness may ask if our friend was

really perfect ; if he had *no fault*. Yes, he had his faults and weaknesses as other good men have. One fault arose partly, if not wholly, from his extreme sensitiveness. His heart was tender as a woman's. Opposition and insult which would have touched some men but slightly would pierce him to the very quick, and cause him days and weeks of bitterness and unrest. Where some men would have brushed these annoyances aside as so many cobwebs, and have gone resolutely on in the path of duty, to Mr. Winsome they were serious and formidable barriers. If he had only had the sublime courage which looks steadily in the face of all obstructions and all "obstructionists" and says "none of these things move me," and yet retained his childlike tenderness of soul, his success would have been even greater than it has been. Still, take him all in all, he is a "good man," an invaluable worker, and a sterling friend, one whom I would "grapple to my soul with hook of steel."

BAND OF HOPE PAPER.

THE DUTY OF SUNDAY-SCHOOL TEACHERS IN RELATION TO TEMPERANCE.



R. RICHARDSON, the celebrated physician, presided over a special meeting of officers and teachers of Sunday schools held in Exeter Hall, London, under the auspices of the United Kingdom Band of Hope Union. The following is extracted from the address he delivered on the occasion :—

"I want to urge upon you as Sunday-school teachers your duties in helping us in our work. You have none of those difficulties to contend with in those you teach (that is, the difficulties amongst the middle-aged and the over middle-aged class of the community which the Dr. had been enumerating). You have the young and virgin soil to work upon. He laughs at wine who never felt its need, and you are teaching those who have never been embarrassed by the necessity which is common to so many. I think I cannot too strongly impress upon you your duties in regard to the young. Quite independently of this special mischief which you have to guard them against, there are the social and moral lessons intermixed with your work bearing on temperance which I would most solemnly enforce upon you as a part of your great duty, and as supplementing the rudimentary work of moral teaching which belong to a past age. I want you to remember seven great points of this subject of temperance and the uses of alcohol.

"I would ask you first to teach your pupils that it is an entire fallacy to suppose that alcohol in any of its forms as intoxicating drink is the gift of God to man. It is no such thing. I know this to be a persuasive argument. Men will tell you of the vast acreage of grape fields, and of miles of fields of waving barley, and speak of these as gifts. They are gifts as fruit and grain, I admit: they are *not* gifts as fermented laboratory and chemically produced alcohol. Man invented alcohol, and produces it by as distinctly chemical a process as I might use to produce chloroform or any of those other agents which are good in their right place, but are very dangerous when they are not so used. No; there are a great many agents in Nature which we may say are natural gifts which stand in this light far before alcohol, such as opium, strychnine, arsenic, if you like. But we cannot think that these agents, though they be nature-produced, are intended to be used by us as agents to demoralise our Nature. How much less, then, is that the case with an agent which man produces as a secondary product from Nature! Do, I pray you, enforce upon those who are under your care that it is an entire fallacy, having no foundation in science at all, that alcohol is a gift from Nature to man. In the whole range of the vast production of living natural things there is not a single fluid of any kind whatever by which they are built up and through which they live in perfect life and action, in development of life and strength, except the one fluid—water. Think you that God is so unwise as to make man a distinctive thing from all this scheme of Nature, and to give him to take that which belongs to no other part of the great scheme of life? Not at all. If so, how would live those multitudes of men who have never seen this agent, how those who lived before it was discovered? Keep this thought in your minds, that in the whole scope and scheme of physiological life one fluid is the simple natural drink—viz., water.

"Secondly, teach the young that, if the habit of drinking intoxicating beverages is never indulged, it is never felt as a want. This is a prime argument to use with the young, that those who have long abstained are those who least feel the want of alcohol. And here is a curious physiological fact which I have discovered, that the effects of alcohol are what we should call cumulative; that when it once enters into the body it creates a desire for itself. I do not know in what way this occurs, but such is the fact. It is as if the tissues which are saturated with it thirsted for it more, and so long as a man is taking even a small quantity of alcohol, so long as his system is under its influence ever so little, this taste is always present. Hence the fallacy of what is called moderate drinking as a safety against excessive drinking. There is, I assure you, no safety for a moderate drinker; but when the body is completely emancipated from the presence of this agent, when no tissue is touched by it, then, in a little time, all the parts acquire freedom, and total abstinence is a complete fact. See how important it is, therefore, to

instruct the young never to acquire the habit of taking wine or strong drink.

"Thirdly, I want you to impress upon the young that if this habit be indulged, the difficulties of throwing it off are tenfold increased; that the danger is always imminent that what is called moderation will pass into excess, and that the results of an intemperate life will be theirs.

"Fourthly, you may further teach by history and by example—but always better by example—that the hardest work, mental and bodily, is best carried out without the stimulating effects of this agent which so many look to for support in all their labours.

"A fifth point is that alcohol has no claims in a scientific sense to be considered as a sustainer either of bodily or mental life or work. It has no kind of claim as a food, and you will do well to let your scholars know at once (for it is a simple question) what is a food.

"Sixthly, you can show that in alcohol there is nothing that can build up any tissue, or supply any force; nay, you can turn round and prove by demonstration upon demonstration that this agent destroys healthy tissue and reduces force. You can show that men travelling in the northern regions in extreme cold, exposed to all the hardships and severity of frost—that such men travel better, work better, preserve health better, if they are not under the influence of that which goes with the cold to produce their destruction.

"Lastly, I would press upon you to teach in your Sunday schools as regards alcohol, that in approaching the subject of temperance, and in showing the uselessness of the most mischievous of all agents within the reach of man, you are promoting a good which extends beyond your own time. I would have you teach that it is a part of the duty of every man to make a heaven even on this earth. I would have you specially show that no such blissful habitation on earth can be while this terrible blot, this constant producer of disease, of crime, and of premature death, exists in our homes, runs down, as it were, through our domestic shrines, and fills the lower parts of our population with want, depravity, and death. Hold forth to the young that there is a future even in this world which partakes of heaven. Tell them how best to remove this one great obstacle to the possession of that future, and your labours will have a rich and immortal reward."



WILD FLOWERS.



MY DEAR CHILDREN,—I should like to say a word to you about the flowers.

Perhaps many of you have been out with your parents or Sunday-school teachers on excursions during the past summer months. You have left the hot and sultry town, the workshop, and the school, and have gone out for a day into the country to see the green fields, the woods, and the parks. You gathered the wild flowers as you ran about in glee, and weaved the daisy chain as you sat down to rest. Some of you have glided over the waters of the miniature lake or fed the graceful swans by the side of the pond, and you were very happy. But do you ever think of Him who gives such blessings, and who scatters the flowers with such a liberal hand?

Is there no lesson you could learn from these lovely flowers that grow by the wayside, that deck our fields, and decorate our hedgerows? A French writer has said that wild flowers are the alphabet of angels, whereby they speak mysterious truths o'er hill and dale. But to the Christian the wild flowers are more than the language of angels. they are the footprints of Deity, the voice of a benevolent Creator speaking not only mysterious truths, but plain and simple facts; they tell us of a loving Father in heaven who cares for His children on earth.

Take the common daisy, which is found in almost every land, and blooms in our own country in every month of the year; examine its construction, how every part is in just proportion, how perfect its symmetry, how neatly the petals are arranged, with the edges so nicely scalloped and tinted. This will give you some conception of the formation of flowers, for all are made on one common principle, and all have certain parts alike, showing to us that it was one great mind that designed them all. When we consider this, and notice their great diversity, their endless variety, their different colours and many sizes, yet all so perfectly made without a mould to form them, a machine to cut them, or a pattern to copy from, and in the case of wild flowers without even a man to till the ground, how can we help but admire the wonderful works of God? The flowers are a proof to us that God loves beauty, taste, and ornament, or why has He made them?

From the wild flowers we may learn many lessons of faith, and hope, and love. They teach us also God's care for His children. Are we poor, and do we fear lest we should not have food and raiment? Let us consider the lilies of the field, how they grow; they toil not, neither do they spin; yet even Solomon, in all his glory, was not arrayed like one of these. Wherefore, if God so clothe the grass of the field, will He not much more feed and clothe us? If He so notice little flowers as to give them such beautiful colours, feed them

with gentle rain, and refresh them with the pearly dew, will He not also take care of those whom He has made to know Himself and enjoy His favour? The rich man may form his parterre and wall his garden round, but the wild flower is the common inheritance of all; it grows by the wayside, in the hedgerows, on the mossy bank, among the grass in the field and at the cottager's door. Children gather these flowers and are full of joy. At sight of them we know that summer is near, and now the summer has passed away and the flowers are gone, we are looking forward beyond autumn and winter to the springtime, when they will return again. You children, like flowers, will die, and, like flowers, you also will live again. Are you prepared for the great change? That you may be transplanted from among the thorns and briars of earth to adorn the bowers of the Eden above is the wish of your humble friend.

A SUNDAY-SCHOOL TEACHER.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS. SEPTEMBER.

MORNING SUBJECTS.		Golden Texts for Repetition.	
SUBJECT.	FOR READING.		
THIRD QUARTER.			
2	The Final Plague	Exod. xi.	Heb. x. 31.
9	The Lord's Passover.....	Exod. xii 1-14, 29-36	1 Cor. v. 7.
16	The Flight from Egypt...	Exod. xiii. 17 to xiv. 9	Ps. cvii. 14.
23	The Sea Divided.....	Exod. xiv. 10-31	Ps. ix. 16.
30	Moses' Song.....	Exod. xv. 1-21...	Ps. lvi. 16.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.	
SUBJECT.	FOR READING.		
THIRD QUARTER.			
2	Paul at Corinth	Acts xviii. 1-17 ...	Rom. xii. 11.
9	Paul at Ephesus.....	Acts xviii. 24 to xix. 12	Ephes. ii. 1.
16	Power of the Word.....	Acts xix. 13-28 ..	Heb. iv. 12.
23	Paul at Miletus	Acts xx. 17-38 ...	2 Cor. iv. 5.
30	Review of the Quarter's Lessons		Ephes. ii. 13.

OCTOBER.

MORNING SUBJECTS.		Golden Texts for Repetition.	
SUBJECT.	FOR READING.		
FOURTH QUARTER.			
7	Jehovah feeds His People	Exod. xvi. 1—18...	John vi. 33.
14	Israel at Rephidim.....	Exod. xvii.	1 Cor. x. 4.
21	Israel at Sinai.....	Exod. xix. 1-11, 20-25	Gal. iii. 24.
28	The Ten Words	Exod. xx. 1—21...	Matt. v. 17.

AFTERNOON SUBJECTS.		Golden Texts for Repetition.	
SUBJECT.	FOR READING.		
FOURTH QUARTER.			
7	Paul at Cæsarea.....	Acts xxi. 1—19 ...	xx. 24.
14	Paul at Jerusalem	Acts xxi. 27—40...	John xv. 20.
21	Paul and the bigoted Jews	Acts xxii. 1-3, 17-30	Rom. x. 21.
28	Paul before the Council...	Acts xxiii. 1—21...	Luke xxi. 15.

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

SCRIPTURAL ENIGMA.

A PROPHET who was called to curse,
 And yet did Israel bless ;
 Laban's young daughter, who, we're told,
 Much beauty did possess.
 The son of Carmi, covetous,
 Who took the accursed thing ;
 The eldest son of Aaron, who
 Death to himself did bring.
 A river on whose banks were seen
 Visions of God most high ;
 A mountain on whose lofty height
 Aaron was called to die.

The initials of these, if rightly combined,
 One of the titles of Christ you will find.

LONDON, BRUNSWICK JUVENILE MISSIONARY SOCIETY.—The annual meeting of this society was held on Monday, May 28th, the chair being occupied by Mr. G. A. K. Hobill. The meeting was varied with addresses by Messrs. H. Moreland, J. Orme, and J. Shrubsall ; recitations by the scholars and singing by the choir. Owing to several important meetings being held in the neighbourhood on the same evening, the attendance was rather small, consequently the collection was also small. The financial statement, taking into account the interruption to our efforts caused by the renovation of our sanctuary, proved very satisfactory, and is as follows :—Collection at annual meeting, £1 2s. ; given by Christmas Carol singers, 4s. 6d. ; collections in missionary boxes for the year—girls, £3 18s. 9d. ; boys, £8 2s. ; infants, 17s. 2d. ; also collections at quarterly meetings, £1 12s. 10d. ; proceeds from Christmas-tree entertainment, £3 3s. 2½d. ; by New Year's offering cards, £6 18s. 6d. ; by Mr. W. G. Denham's lecture, 15s. ; Mr. J. R. Shrubsall's box, 16s. 9½d. ; Mr. Crookford's box, 7s. ; Bertram T. Lee's farthings, 3s. ; an offering to the Lord, £5 ; total income, £36 0s. 9d. ; deduct expenses, £2 7s. 7d. ; nett total, £33 18s. 2d.—H. H. H., Secretary.

ZION CHAPEL, SOUTH SHIELDS. — On Sunday afternoon, May 6th, 1877, we held our Juvenile Missionary Meeting. Mr. E. W. Johnson

occupied the chair. After some appropriate and interesting remarks he called on Miss Morris, who recited the opening address. The secretary read the report, which gave proof of a willingness on the part of our juvenile friends to send missionaries to heathen lands. Mr. G. Thompson gave an able address, and was followed by Miss M. A. Sharp, Maggie Welsh, M. Simpson, A. Welsh, Kate Smith, Masters Charles Underhill, J. Horn, Walter Friar, and George Sharp, who went through the following pieces in a very creditable manner, viz.:—"Missionary Death in the Desert," "Old Spadsie," "Freely ye have received," "Freely given," "Reading the Bible," "Missionary Enterprise," "What I can do." Hymns were sung by the choir, winding up with the collection piece, all of which were enthusiastically encored by the audience. Amount raised—by cards, £2 18s. 11d.; by box, £2 17s. 3½d., collection, £2 18s. 0½d.; total, £8 9s. 8d.—THOMAS PURVIS, Secretary.

Memoir.

—O—

AGNES BAYLISS,

WILLENHALL.

SHE was born at Tivdale, September 28th, 1857. When a child she was brought to our Sunday school, and became a regular and punctual scholar, ready to go to school and wishful to be there in time. When her parents removed to Willenhall, after trying several schools, she came to ours at Frogsell Street, glad to find a school belonging to the denomination in which she had been brought up. She became a teacher and also a member of the choir, and was always cheerful and earnest in her work. She was not a fine-weather teacher, wet or dry she was found among her scholars.

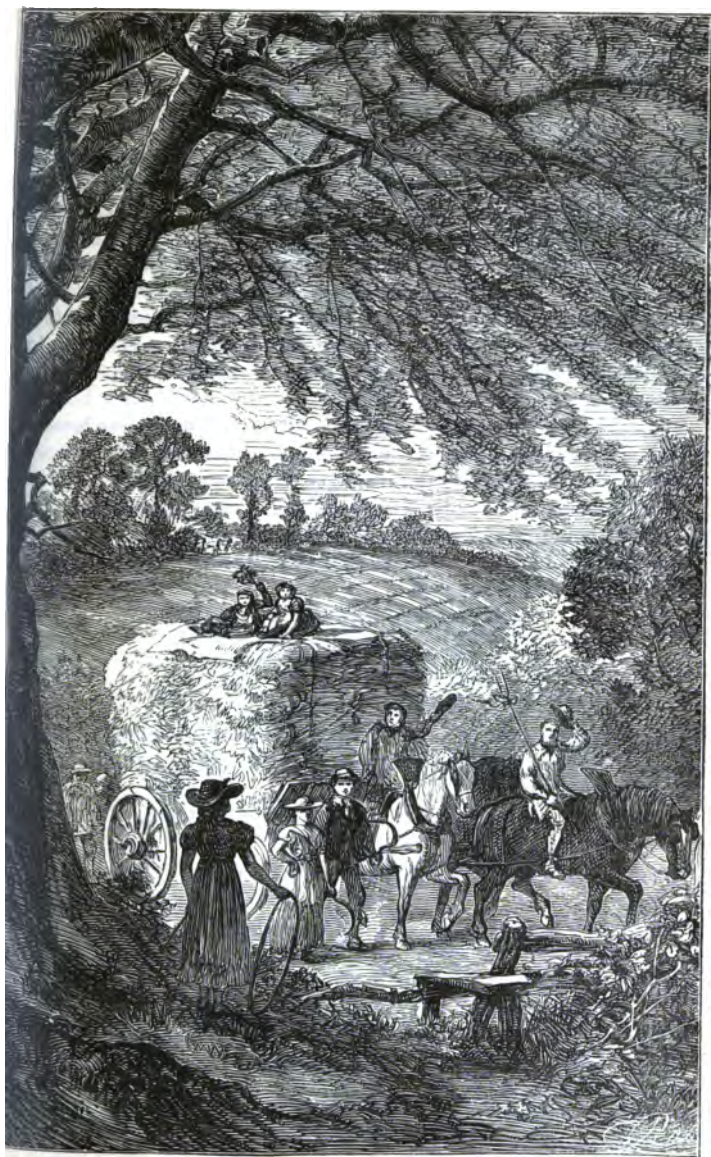
Her filial piety must be mentioned with commendation. She showed her love to her parents by her acts. For four successive years, and until her sickness rendered her unable to do it, she every morning took her mother a cup at tea at seven o'clock.

As she lived a Christian life she died a Christian death. She testified to her acceptance in Christ, and her safety in Him as her hope of salvation. She would ask friends to sing for her "Safe in the arms of Jesus," and affirm that she was safe in His arms. I visited her as she lay on a bed of suffering and pain a few days before she died, when, in answer to questions I put to her, she said she was ready, and that Jesus was here. On the day before her departure she said to her mother, "Mother, don't break your heart over me as I did over my sister. Don't weep; I am going home to be with Jesus." And so she fell asleep in Him.

"Asleep in Jesus! Blessed sleep
From which none ever wake to weep;
A calm and undisturbed repose
Unbroken by the last of foes.

"Asleep in Jesus! Oh, for me
May such a blissful refuge be!
Securely shall my ashes lie
Waiting the summons from on high."

W. HORWOOD.



HARVEST HOME.

HARVEST HOME



HEREVER, throughout the earth, there is such a thing as a formal harvest, there also appears an inclination to mark it with a festive celebration. The wonder, the gratitude, the piety felt towards the Great Author of Nature when it is brought before us that, once more, as it has ever been, the ripening of a few varieties of grass has furnished food for earth's teeming millions, insure that there should everywhere be some sort of feast of ingathering. In England this festival passes generally under the endeared name of *Harvest Home*.

In the old simple days of England, the grain last cut was brought home in its waggon, called the hock-cart, surmounted by a figure formed of a sheaf with gay dressings—a presumable representation of the goddess Ceres, while a pipe and taber went merrily sounding in front, and the reapers tripped around in a hand-in-hand ring, singing appropriate songs, or simply by shouts and cries giving vent to the excitement of the day.

Harvest home, harvest home,
We have ploughed, we have sowed,
We have reaped, we have mowed,
We have brought home every load,
Hip, hip, hip, harvest home!

So they sang or shouted. In Lincolnshire and other districts hand-balls were carried by those riding on the last load, and the following rhymes were sung:

The houghs do shake, and the bells do ring,
So merrily comes our harvest in,
Our harvest in, our harvest in,
So merrily comes our harvest in!

Hurrah!

Troops of village children who had contributed in various ways to the great labour joined the throng, solaced with plum-cake in requital of their little services.

In some provinces it was a favourite practical joke to lay an ambuscade at some place where a high bank or tree gave opportunity and drench the hock-cart with water. Great was the merriment when this was cleverly done, the riders laughing, while they shook themselves, as merrily as the rest. Under all the rustic jocosities of the occasion there seemed a basis of pagan custom; but it was such

as not to exclude a Christian sympathy. Indeed, the harvest home of Old England was obviously a piece of natural religion, an ebullition of jocund gratitude to the Divine Source of all earthly blessings.

In some parts these harvest-home festivities are continued to the present, though not without some changes in their mode of celebration. There has been a tendency of late to substitute in their place a harvest festival for the whole parish, to which all the farmers contribute and which their labourers may freely attend. This festival is usually commenced with a special service in the church, followed by a dinner in a tent, and continued with rural sports, and sometimes including a tea-drinking for women. This is an excellent institution in addition to the old harvest feast ; but that should also be preserved, for as a bond of union between the farmer and his work-people it is of inestimable value.

We have abridged the above from Robert Chambers's "Book of Days," where may be found a full account of harvest festivities. In the following lines these festivities are well described and appropriately moralised upon :—

The rustic song proclaims the work is done,
 Each honest labourer's features wear a smile,
 For Ceres has bestowed her annual boon—
 A plenteous harvest crowns their "useful toil."
 And, lo ! the "last load" leaves the stubble-fields,
 And slowly moves along the upland lea ;
 In checkered groups the glowing landscape yields
 A scene of jollity and social glee.
 'Tis eve, and from the east, so lovely blue,
 With broader disc behold pale Cynthia come !
 And oft I turn her full round orb to view,
 And muse upon the final "Harvest Elme,"
 When those who people this wide world shall be
 All gathered to their final destiny.

It is now customary to have harvest thanksgiving services in town as well as country villages, and in some instances the church or chapel is appropriately decorated on the occasion with fruits and flowers. These services are very proper, and should be encouraged. They lead us to trace our blessings to their sources, remind us that while we plant and sow it is God which giveth the increase, and give us a special opportunity of attending to the exhortation :—"Oh, that men would praise the Lord for His goodness, and His wonderful works to the children of men."

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of* "A Year at School," &c., &c.

Letter No. 48.

FROM BEN BARLOW to JOE BLAND.

Waterside House,
Worcester, Sept. 13th, 187—.

MY DEAR JOE,

Many thanks for your letter, and for the long account of the cricket-match. I am surprised the newspaper folks did not print it. It is a precious lot more interesting than all the news they did print.

I am very glad to see the school keeps up its credit in the cricket-field. Tom Blunt will make a first-rate captain if he only keeps cool, and I see from the score that he is already a more careful player than he used to be.

With kind regards to yourself, and all other old schoolfellows, I am, yours truly,

BEN BARLOW.

Letter No. 49.

FROM ERNIE INSTONE to BEN BARLOW.

London, Sept. 16, 187—.

MY DEAR MASTER BARLOW,

i am so Sory to tel you my Beutifle Rabit is ded. it Hapend this way. i had Fasn'd it up all rite and gon to Bed. but a Cusen off mine call'd and they let him see my Rabit. i supose he didn't fasn the Hutch properly, for the Rabit got out onto the lorn, and the Survant found it this morning ded in a Corner. Pa says ther was a Frost in the Nite, and that killed it. i am so Sorry. i am afrade you will Think i didn't take Care enuff off it. but i would soonr have lost all my Toys than the Rabit. i remane, yours truly,

ERNIE INSTONE.

Letter No. 50.

FROM BEN BARLOW to ERNIE INSTONE.

Waterside House,
Worcester, Sept. 19th, 187—.

MY DEAR ERNIE,

I am very sorry to hear of the misfortune to your rabbit, because you seemed so very fond of the little pet. But don't put yourself about. You shall have a *couple* in place of it when your brother Ted comes home at Christmas. I will get them sent here from Woodbourne the day before, and then he can take them on with him. I

would have a couple sent from home at once, but I'm afraid they would die on the road.

Don't fret about the rabbit. I have had more than a dozen die—some killed by cats, some by fighting among themselves, and some by overfeeding.

With kind remembrances to all at home, believe me, your affectionate friend,
BEN BARLOW.

Letter No. 51.

FROM TED INSTONE TO CHARLIE THORNTON.

Waterside House,
Worcester, Sept. 21st, 187—.

DEAR THORNTON,

I daresay you will be a bit surprised to get a letter from me, but I have heard from Ben of your having got a situation, and I take this opportunity of congratulating you upon it, and also on your having done so well at cricket.

By the bye, Thornton, did you see the report that Bland sent to the *Tinbury Mercury*? He sent us a copy—I think he said you asked him to do so—and it is, indeed, a most remarkable document. Do you think he really expected the folks to publish it? He speaks in his letter to Ben as if he was disgusted with them for preferring such dry things as War News, Parliamentary Intelligence, and Market Returns before his highly interesting and enthusiastic report.

Get Bland to show it you if you can. It is enough to make one grin, though our friend Ben read it seriously enough. That was because it praises up all his old chums. Why, from beginning to end it is full of compliments to you and your club, and sneers or censures on your opponents. However, from your point of view the report is very interesting, and we both read of your exploits with much pleasure.

You can tell Bland if he will only persevere and practise, he will in a few years be able to take his place among what Pa calls the "penny-a-liners" of the London press.

I hope you like your situation, and that you have nice fellows in the office with you. Do not trouble to reply to this in a hurry. I know you have not much leisure. Yours truly, TED INSTONE.

Letter No. 52.

FROM BEN BARLOW TO MRS. BARLOW.

Waterside House,
Worcester, Sept. 28th, 187—.

MY DEAR MOTHER,—

My basket of linen came all safe, and the cake too. Ted says it gets better in quality every time.

I am getting on well with my lessons. Dr. Tasker says so. Now

that I make up my mind to learn them and set about them straight away, they seem to be as easy again as they were when I used to put them off till the last minute. But even now Ted Instone does his a great deal sooner than me. He is very quick at Latin and figures.

I am very well, dear mother, and am getting on wonderfully in cricketing. Our captain never plays now without me. I have had lots of rowing, too, since the holidays. I have learned to "feather" my oar, and can pull half a mile without feeling hurt at all. Some of us wanted to pull in a race at a Regatta which was held here about a fortnight ago, but Mr. Macpherson advised us not. We watched the races from Dr. Taker's garden. The doctor would not let us go up to the starting-place, because he thought there would be a lot of low betting men about. He said a rowing-match was as innocent a sport as could be, but unfortunately it was becoming as common to bet on such races as it is on horse-racing.

You will be sorry to hear that the rabbit I sent to Ernie Instone got out the other night and died of cold. The little fellow is much put about over it. I have promised that Ted shall take him a couple at Christmas. I am afraid they would not live, or I would ask Bob to pack up a couple and send them at once by rail as a parcel.

With love to yourself, to father, Clara, and Helen, and with kind regards from Ted, I remain, my dear mother, your affectionate son,
BEN.

— — —
Letter No. 53.

FROM CHARLIE THORNTON TO BEN BARLOW.

High Street, Woodbourne,
October, 4th, 187—.

MY DEAR BEN,—

I am almost ashamed to think how long your letter has been unanswered, but Saturday half-holidays are almost the only leisure I have, and a bright afternoon is such a temptation to ramble in the fields and woods, that I have not had the heart to deny myself.

The first Saturday after the match a few of us walked to Hammerthorpe and had a delightful hour's rowing on the reservoir there. They have some capital boats there now, both outriggers and canoes, and I enjoyed myself immensely. So did the others, unless it was John Williams, who happened to "catch a crab" in rowing a very light outrigger and so fell overboard. As you know, he can swim like a frog, so all he got was a thorough wetting. He borrowed some dry clothes from a relation of his at Hammerthorpe, and walked home with us, as jolly as ever, in a suit about two sizes too big for him.

On the next Saturday, Tom Blunt, George Wasdell, Edgar Foster, and I set off to gather blackberries and nuts in Upleigh Wood. We gathered as many nuts as we could eat, besides carrying a decent

bagful home, and you may be sure our mouths were as black as any negro's with eating ripe blackberries. I enjoyed myself very much. You would hardly believe what a treat it is to get an hour or two in the woods now that I so seldom have the opportunity.

The next half-holiday we had a grand turn out at "Hare and Hounds," and though we managed to keep out of scrapes for trespassing, we had plenty of fun. George Waddell and Fred Higgins were the hares. You know what long legs they have. Well, they crossed and re-crossed the brook that runs through Upleigh about a dozen times in the widest places. And so we fellows with legs of about the usual dimensions had to jump it as best we could, sometimes landing in soft mud and sometimes splashing into the water.

Last Saturday we played cricket among ourselves, choosing sides out of the school club.

To-day it is too wet to go out, so I have written to you. You must thank the weather for the letter, if you feel thankful for it at all.

I like my situation pretty well. It is very close for me, of course, and one or two of the fellows are very disagreeable and overbearing towards me as the last comer, but I am getting into my work now, and I feel more comfortable than I did at first.

I must now wind up. Hoping to hear from you soon, I remain,
yours truly, CHARLIE THORNTON.

P.S.—Please give enclosed short note to your friend Instone.

Letter No. 54.

FROM CHARLIE THORNTON TO TED INSTONE.

High Street, Woodbourne,
October 4th, 187—.

DEAR INSTONE,—

Though, as you say, I have not much leisure to write, I cannot but thank you for your kind letter. I am glad you were so much interested in the report of our cricket-match. I have seen the account Joe Bland wrote for the newspaper, and it certainly did amuse me to see how his feelings had carried him away, for he is the best and most honest fellow I know, and would not wilfully misrepresent anything for the world. Of course you were joking when you spoke about "penny-a-liners," but seriously I believe Joe will make his mark some day as an author of some sort. He could always beat the whole school at composition, and Mr. Jones has said many a time that his paraphrases were nearly perfect.

I am doing fairly well at the office, and some of the clerks are very agreeable fellows, others not so nice. It is hard to be shut up so many hours, of course, but I try not to think about it, and most of my work is pleasant enough.

With kind regards, yours truly,

CHARLIE THORNTON.

Letter No. 55.

From DOCTOR BARLOW to BEN BARLOW.

The Laurels, Woodbourne,

October 15th, 187—.

DEAR BEN,—

I am glad to hear you are well. Hope you are keeping out of scrapes too. I don't mind how much cricketing and rowing you do *after* lessons are done. Don't neglect work for play.

Give Dr. Tasker my warm thanks for keeping you away from the boat-race. Never stay in company where betting is going on. That and drink are the curse of this country. Betting leads to lying, stealing, and the gaol. If you want to race, race among yourselves.

Now about the rabbit you gave to young Instone. It just happens that I am going to London next week. One of my Tidbury patients has gone up to consult an eminent surgeon there. He has proposed an operation. I am asked to be present when it is performed. So I think I will get Bob to pack up two of your rabbits and take them with me.

As Ernie is a cripple he can't have very much to amuse him, and the rabbits may cheer him up. With love from us all, I am, your affectionate father,

OLIVER BARLOW.

Letter No. 56.

From BEN BARLOW to DR. BARLOW.

Waterside House,

Worcester, October 10th, 187—.

MY DEAR FATHER,—

I am *so* glad you are going to London. Ernie *will* be pleased to have the rabbits. I told Ted of it, but we agreed not to let Ernie know. It will be such a pleasant surprise for him. Please ask Bob to choose a pair of the strongest grey rabbits. I would have sent blue ones, but they are not so strong and hardy as the greys. Ted thanks you very much. I wish I was going with you.

With love to all at home, I am, in great haste, your affectionate son,

BEN BARLOW.

Letter No. 57.

From ERNIE INSTONE to BEN BARLOW.

London, October 24th, 187—.

MY DEAR MASTER BARLOW,—

what do you Think? last Nite someboddy came to the Dore and left a Big Box. it was a man from the Raleway. he said he was to Bring it for Master Ernest. well, when we unfasned the Box, there were too large beautifile Rabits—oh! such lovely Pets. i kneu drekly you had sent them. but we can't think how they got

here. i can't tell you how much obliged i am. the Box they came in will make a Capitle Hutch. you may be Sure we shall not let these Rabits get out like the Other poor little Fellow did.

i have just been to give the Rabits their Diner. they seeme very Haphey and quiet at home in their Hutch.

with Love to Yourself and Ted, from me and Pa and Ma, i remane,
yours gratefully, ERNIE INSTONE.

Letter No. 58.

From Dr. BARLOW to BEN BARLOW.

Strand Hotel, London,
October 24th, 187—.

DEAR BEN,—

Well, here I am you see. I got here last night. So did the rabbits safe and sound. I carried them nearly to your friend's house, but not caring to get a lot of thanks for my trouble, I gave a porter, who was passing, some coppers to deliver the box.

I am going this afternoon to witness the operation I spoke of. If it is successful I shall start for home to-night. If not successful, I may stay two or three days. I remain, my dear Ben, your affectionate father,
OLIVER BARLOW.

TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CAAPTER XVI.—A STRANGE SCENE IN THE PRIVATE OFFICE.



WEEK after the strange events narrated in the last chapter Mr. Trueman and his manager were engaged in a long conversation about the doings of their assistants. This latter gentleman narrated such facts as he had got together.

"It is then as we have supposed," said Mr. Trueman. "Foster has been led into sin by Barker. We must have the matter stopped as speedily as possible. It seems quite clear to me that Barker has carried on dishonest practices for some time. His father cannot possibly send him money as he has made Foster believe. He is a poor man and has, I know, a task to make ends meet. To-day I shall be too much engaged to see to the matter, but to-morrow we will go into the whole affair. Ask Mr. Earnest to come down here to-morrow that he may face the young gentlemen should they attempt to deny anything."

We need scarcely say that Foster had a sad time of it all that week. He was now beginning to reap the fruit of the seeds he had sown. Every time the manager entered the office he felt sure that

he had come to call him to account for the £5. The days went slowly on and seemed almost like weeks. When the sixth day passed and Barker brought no money he grew quite miserable. He was all the more sad because Barker treated the affair so lightly. When asked for the cash, he simply said that his father had not yet sent it, but would be sure to do so before the end of another week.

Foster sought his room and found relief in tears, the first he had shed for many a day. As he sat alone his conscience, not yet dethroned, gave him little rest. Had he possessed worlds, he would have given them just to have put back the clock of time a few years. But that could not be. The years had gone and he had wasted them; worse than that, in those years he had planted the seeds of sin, and was now reaping sheaves of bitterness, with a fair prospect of a harvest of misery. He placed his head upon his hands and sobbed like a child.

He was aroused by the appearance of his companion, and under the spell which he seemed to have over him, he left his room and strolled out. Company, however, gave him little or no relief. At an early hour he returned home, and retired seeking relief in sleep.

At the appointed time next day, the master, manager, and Mr. Earnest were in the private office at the firm. Before sending for the young men, Mr. Trueman said :

"I have thought a good deal about this matter and have come to the conclusion that instead of having them placed in the hands of the police, I will dismiss Barker without a character. As to Foster, if he will confess his share of the guilt, show signs of contrition, promise to reform, and never again associate with Barker, he shall be kept on. But," continued he, "all this goes on the presumption that he is no further criminated than you have been able to discover. For whilst I am willing to forgive that into which I believe he has been unwillingly led, I cannot pledge myself to forgive him should there be any further deficiencies."

When Mr. Earnest had gone into the next room, Barker and Foster were called up. The books and cash under Foster's care were brought up too. Mr. Trueman asked them to be seated, placing chairs for them in such a position that he could see them both.

"I have," said he, "two or three things of importance to speak to you about. During my recent absence from home, you, Mr. Barker, met with an accident. I want you to tell me how it happened."

Barker told the same story which he had previously told to the manager. Turning to Foster, Mr. Trueman said :

"Had you ever previously seen the man who struck Mr. Baker?" Foster, who at this moment caught Barker's eye, seemed a little excited, but declared that he had never seen the man before he struck his companion. "I have had reason to suspect that you have tried to deceive us in this matter," said the master, "and believe you were engaged in a fight. Is it so?" This they both denied.

Mr. Trueman was very much excited, but made an effort to keep cool. Turning to Foster he said: "Your books have been recently examined, and we find that you are £5 deficient. What has become of the cash?" The colour rose to his face; his whole appearance was one of guilt. But as if under the influence of some evil spirit he declared that he knew nothing about it. "You don't?" asked the master.

"Indeed I do not," said he, as he moved about in his chair very uneasily.

"Mr. Barker," said Mr. Trueman, "you lost several pounds on the last horse-race, in all more than a quarter's salary. A few evenings after you were seen to be in possession of several sovereigns in gold. I want to know how you came to have so much money?"

Without the least hesitation he said the money was all his own; some of it he had saved; the rest he had won on previous races.

All this took the master's breath. For a minute or two he was quite unable to ask any further questions. At length he continued:

"I suspect that you are still attempting to deceive me. Mr. Foster, tell me all you know about this £5, and whether Mr. Barker has had it."

He was about to tell the whole truth and ask to be forgiven, when he again caught Barker's gaze; and so did Mr. Trueman. He declared as solemnly as he could with a lie on his lips, that he knew nothing about it. This relieved his companion, who also declared that he had not seen a penny of the cash. The master could bear no more. He touched a bell, and, to the surprise and confusion of both the young men, Mr. Earnest, whom they both recognised as the stranger who had stopped the fight in the billiard-room, and helped Barker into the street, walked into the office.

CHAPTER XVII.—DISMISSED, DISGRACED.

Shame and confusion seized both Barker and Foster when brought face to face with Earnest. In a moment the whole thing seemed to flash across their minds. They could remember having seen him several times at different places. It was evident that he had been a spy. For a few moments no one spoke, all seemed to be in trouble. At length Mr. Trueman said:

"I suppose you have seen this gentleman before, and will be rather surprised to see him here. You have conspired to deceive me, and have not scrupled to tell base lies with the hope of covering up your doings. But you should be sure that your sins will find you out. He then told them both how the £5 had gone, and convinced them that he was in possession of all the facts, by giving them a part of the conversation which they knew had taken place when Barker got the cash.

They both saw that any further attempt to deceive would be useless. Foster was quite overcome. He had lied to his master, and he knew it; what would be the consequence he could not tell.

He was about to plead for himself and companion, when they were interrupted by a sharp rap at the office door. Mr. Trueman answered the knock, and demanded the disturber's business.

"A gentleman wishes to see you immediately," said the youth, who had knocked.

"Tell him to wait, or call again," said the master.

"He says he cannot wait," replied the youth; "he has but a few minutes to spare, and must see you about a bill for £5 which has been sent to him for an account settled some days ago."

The master went down to see the gentleman. In a minute they were in the clerks' office, where the man brought out a bill received by post that morning.

"Don't you owe this money?" inquired Mr. Trueman.

"Owe it? No!" said he. "My boy came here and paid it some days ago."

"Have you the settled note?" asked the grocer.

"Yes," said the man, as he pulled out the note and placed it in Mr. Trueman's hands.

The colour rose to the grocer's face as he read Foster's name, together with the date, signed in the usual way. Getting him to leave both bills, he assured him that there must be a mistake, that the matter should be put right, and then bowed him out.

This was a discovery for which he was not prepared. He knew that Foster had appropriated the first £5 for Barker, but what about this? Trembling with excitement which he could no longer subdue, he hastened back to the private office. He presented to Foster the unsettled bill, and asked for an explanation. Foster did not understand him, and said so.

"Can you understand that?" said Mr. Trueman as he threw down the settled bill for the same account bearing Foster's name.

"Indeed, I cannot," said he, when he had looked at it for a few minutes. "I do not know anything about it."

Mr. Trueman was very angry at what he supposed Foster's daring impudence in denying the bill which bore his name. It was in vain to plead ignorance of it, and his innocence of theft.

"I cannot believe you," said Mr. Trueman, "with such evidence of your guilt before me. Besides, you deceived me once as solemnly declaring your innocence then as now, and yet I proved you guilty."

Barker looked on, but never in the least betrayed his guilt. He saw the danger his companion was in, but was too bad a man to save him by confessing his guilt.

We attempt no further description of the scene. Mr. Trueman felt it to be his duty to have them both locked up, but hesitated to take such a course. He dismissed them both without character, and in his anger made them leave the premises as soon as ever their things could be pushed into their boxes. Barker was heartily glad to get off thus easily; but Foster, whilst he felt that he deserved all he had got, was wounded by the thought that he was blamed for an act which

he had not committed. True, he could not account for the settled bill, but he knew he had never signed it.

Foster left the firm, procured lodgings, and stayed in them for some days, ashamed to be seen outside. When a few weeks has passed, both the young men had obtained situations in inferior positions. Barker still managed to retain his hold upon Foster, who never in the least suspected him of the forgery of his name. They were apparently as good friends as ever, though Foster was far from happy. Sometimes, to forget his misery, he drank deeply. The habit of drinking grew upon him so rapidly that in a few months after being turned from Mr. Trueman's he was what may be called a confirmed drunkard. Not long after their dismissal Barker was detected in some dishonest act and sent to prison. Foster sank lower and lower, until he seemed lost to society and almost beyond hope of recovery.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XX. — THE HORSE.



SOME of my young friends may be surprised at the selection of so ordinary an animal as the horse, and perhaps wonder if they can be told anything about it that they do not well know already. But it may be replied, animals that are the most common deserve our strictest attention, and such are the elements of wonder that dwell in the most familiar thing, that to the reflecting mind there is always something fresh to learn and something new to admire. What is more common than the sunlight? and yet, though philosophers have been discoursing about it for thousands of years, fresh truth is discovered about it in the present day; and though we have been beholding it from our youth, we still love its glorious rays, and always feel a degree of regret when the curtain of the clouds is drawn across the face of the sky.

One great thing connected with all domestic animals, that leads us to admire the goodness of God, is that while they work hard for us they cost but little, and they prefer bondage in the habitations of man to their own liberty. Many of them, indeed, degenerate with freedom, which shows that their natural condition is that of service. Could we tame the lion and the tiger they would never cheerfully bear the yoke; or even were this attained their ravenous and carnivorous appetites would ruin their owners instead of assisting them. The horse, the ox, the sheep, on the other hand, have no appetite for costly food, but are content with grass and the most inexpensive products of our fields. Neither their abstemious inclination, nor their happy content, is produced by our development or training; they are

both ordained by Him who bestows on man so many good and perfect gifts.

The structure of the horse is very marvellous. He is manifestly formed for strength, speed, and ease of motion ; and every arrangement is made in subordination to his being a help to man. What is most remarkable is that his toes, instead of being separated as in most other animals, are all solidified into one bony mass, encased in a dense horny hoof, strong enough to support his weight, and sustain the shock of active and vigorous and continued leaps. The fiery and intelligent eye ; the gracefully arched neck ; the flexible limbs that in some instances have literally outstripped the wind ; the flowing mane ; the head erected as if he aspired to lift himself above the level of other animals, and behold man face to face, all combine to make the horse a truly noble creature. His great function is to carry ourselves and our burdens, but he also ministers in no small degree to our pleasure and amusement, and to our defence and security. The horse has followed man over the whole surface of the earth, and is found in every country except within the Arctic circle—from the Ganges to the Rio de Plata, and from the sea-coast of Africa to the mountainous plain of Antisana, 13,000 feet above the level of the ocean. When we consider the vast range of his services, and the world-wide area over which they extend, and the graceful beauty of his form, we might call him "king of beasts" if the lion had not appropriated the honourable designation. Whether we look at the thick-set, full-chested horse that goes before the plough, or the fiery prancing steed that seems so proud of the handsome equipage he draws behind him, or the massive noble animal generally selected for purposes of war, we see occasion to admire the goodness of God who has placed at our service a creature of such versatile powers, and yet of such obedient disposition.

The affection of the horse is equal to his intelligence ; he comes not only to know but to love his owner. He reaches his highest perfection in Arabia, where he seems to have degenerated no more than the lion and tiger in their native forests. The attachment of the Arab to his steed is proverbial, and hundreds of stories might be given illustrative of the affection that subsists between them. The Arab regards his horse next to his children, and the same tent that shelters the family provides a stable for the steed. The whip is never used ; kindness is found far more effective than violence. An affection as great is often found to exist between the English drayman and the horse he daily grooms and leads.

In the prairies of North and South America there are thousands of wild horses, which are hunted mainly for their hides. Of their plenty some idea may be got from the fact that a few years ago any number of them could be purchased from the Indians for a few pence each. In its wild state the horse is considerably smaller than when domesticated, and possesses much less symmetry of form. It is, however, swift, active, and vigilant, and, like some other tribes of

animals, always has a sentinel, who by a loud neigh gives notice to the herd of approaching danger. The Indians who live by capturing them, ride from infancy—they ride so much that they cannot properly walk; the horse almost becomes part of the man, and without him they are helpless. They generally ride without saddle or bridle, guiding the horse with their knees, or with a small leather thong fastened like a halter. They capture the wild horses with a long lasso which they throw with great dexterity, seldom missing the animal they aim at. These wild horses are easily tamed and broken, but are never as valuable as those that are bred under the care of man.

In ancient time the horse was used for purposes of war alone. The ox was generally used in agriculture, and for drawing heavy burdens, and the ass for riding. There is not a single instance in the Scriptures of the horse being used for purposes of agriculture, or locomotion, with the exception of Isaiah xxviii., 28. And even in this instance where the horses are used for threshing, it is probable that they were war-horses wildly driven about on the strewed corn. The sublime description of the horse in Job—a description never excelled—refers to the war-horse alone: "Hast thou given the horse strength? Hast thou clothed his neck with thunder? Canst thou make him afraid as a grasshopper? the glory of his nostrils is terrible. He paweth in the valley, and rejoiceth in his strength: he goeth on to meet the armed men. He mocketh at fear and is not affrighted; neither turneth he back from the sword. The quiver rattleth against him the glittering spear and the shield. He swalloweth the ground with fierceness and rage; neither believeth he that it is the sound of the trumpet. He saith among the trumpets Ha! Ha! and he smelleth the battle afar off, the thunder of the captains and the shouting."

It is satisfactory to know that the horse is less used now for purposes of war than for purposes of peace. It is sad proof of the degradation of man that some of the best gifts of God should have been so abused as to be made destructive and pernicious instead of beneficial. The millennium may not be expected until more changes yet have taken place, but it is a matter of congratulation that the valuable qualities of this noble animal have been discovered, and that his services in aid of commerce and civilisation have far eclipsed the questionable advantages of his boldness on the battlefield. When men shall have learned universally the intentions of Nature, which are the purposes of God, and be willing to act accordingly, the purity and happiness of Eden will be restored to the earth, and the war-drum will throb no longer, and the battle-flag will be for ever furled.



PAPERS FOR THOUGHTFUL BOYS.

By THOS. STONELEY.

X.—PRODUCTS OF SKILLED LABOUR.—SILK, No. II.

CULTURE AND MANUFACTURE.



SILK is a fine and delicate fibre which is spun by a kind of caterpillar called the silkworm. Like all other insects of the same class the silkworm undergoes a variety of changes during the short period of its life; assuming in each of three successive transformations a form wholly dissimilar to that with which it was previously invested. Silkworms proceed from eggs which are deposited during the summer by a greyish kind of moth. These eggs are equal in size to a grain of mustard seed. Their colour often is yellow; but in three or four days they acquire a bluish cast. When the silkworm is hatched the weight of it is only the hundredth part of a grain. The silkworm is fed upon the leaves of the mulberry tree. In thirty days it devours above an ounce of these leaves; and in twenty-eight days it becomes forty times longer than when it was hatched. The whole of the curious changes and labours which accompany and characterise the life of the silkworm are performed within the space of a very few weeks. The three successive stages of being put on by this insect are: that of the worm or caterpillar, that of the chrysalis or aurelia, and that of the moth. When at its full growth the silkworm is a slender caterpillar from two and a half to three inches in length. It may then be seen to have twelve rings round its body parallel to each other. It has sixteen legs, in pairs. Its mouth is peculiar, having a vertical instead of a horizontal aperture; and the worm is furnished with eighteen breathing holes, placed at equal distances down the body, nine on each side. On each side of the head, near to the mouth, seven small eyes may be discovered. The two apertures or openings through which the worm draws its silky substance are placed just beneath the jaw, and close to each other. When the silkworm has reached its full development, its desire for food begins to abate, and soon after it entirely ceases to touch the mulberry leaves. It appears restless and uneasy; erects its head, and moves about from side to side with a circular motion in quest of a place wherein it can commence its labour of spinning. When the worm has fixed upon some angle, or hollow place, whose dimensions agree with the size of its intended silk ball or cocoon, it begins its labour by spinning thin and irregular threads, which are intended to support its future dwelling. During the first day the insect forms upon these a loose structure of an oval shape, which is called floss silk, and within which covering, in the three following days, it forms the firm and consistent yellow ball which is the valuable silk; and many persons who have examined this ball of silk with attention are of opinion

that its thread will reach two thousand feet in length. The object of the worm in spinning this cocoon is to defend itself from injury and cold, but man, taking advantage of the useful qualities possessed by these fine threads of silk, uses it to produce his most gorgeous apparel. In spinning, the worm rests on its hind legs, and employs its mouth and front legs in the task of directing and fastening the thread; when the labour of spinning is finished it smears the entire internal surface of the cocoon with gum, very similar in its nature to the matter which forms the silk itself: this being, doubtless, designed as a shield against rain for the chrysalis in its natural state. The ball being finished in ten days, the spinner rests, and then changes into a form, without a mouth, or eyes, legs, or wings, with a smooth brown skin. Silkworms remain in this state from fifteen to thirty days, when they throw off their silky coverings, and reappear as large greyish moths. They then lay hundreds of eggs for the next year, and die in two or three days after.

Let us pause here to consider the wonderful wisdom of God as displayed in the life of this little worm. Its food, as has been stated, is the leaf of the mulberry tree; and Providence, as if to ensure the silkworm a certain supply, has so ordained it that no other insect will eat the mulberry leaf; while the beautiful silky nature of this leaf makes it better adapted than any other for the worm to spin into a long thread of silk.

Again, the silkworm does not wander abroad, as other caterpillars do, but crawls slowly about the spot where it is fed. It is said of the generality of them that their own spontaneous will seldom leads them to travel over a greater space than three feet during their lives. This tameness lessens the care of those who keep silkworms, and secures the produce of their labours, namely, the cocoons of silk. Although shut up in the cocoon the silkworm still lives; and when it becomes a moth, it does not gnaw away the covering to regain its liberty, which would break the fibres and render the silk of little value, but it moistens the inside of its dwelling; loosens, without breaking the thread of the silken ball, and with its hooked feet pushes aside the fibres and escapes. The silk is, however, generally secured by placing the cocoons in a warm oven, and thus destroying the worms within them. But a few are allowed to live, that they may become moths and lay eggs for the next year. The rearing of silkworms upon any useful scale demands a great degree of skillfulness and care. The finest silk is obtained from those reared in China. They are also reared in the East Indies and in Persia, and in some parts of Europe, as in Italy and the warmest parts of France. In England the climate is not adapted for their production, hence the few that are kept in this country are only for amusement, as they produce little silk.

In some parts of China the silkworm remains at liberty, feeding at pleasure upon the leaves of its native mulberry tree, and going through all its changes among the branches, uncontrolled by the hand,

and unassisted by the cares of man. This silk, the spontaneous offering of nature, is not, however, equal in fineness to that which is spun by worms under shelter, and whose progressions are influenced by careful attendance. Much attention is therefore bestowed by the Chinese in the artificial rearing of silkworms, which is carried on in establishments specially erected.

In India the climate admits of silkworms being reared in buildings resembling sheds rather than houses. The worms are placed in shallow boxes made of bamboo, and each worm is put to spin in a small cell of plaited bamboo.

To unwind the cocoons they are placed in a basin of warm water, which dissolves the varnish, and the silk is then slowly wound off; formerly this was done by hand, but now machinery is chiefly employed, which winds off the silk from a bowl of cocoons at the same time. The silk is coiled into banks or skeins, and in this form is imported into this country. This is called raw silk, and is generally of a bright buff or golden yellow colour, but there are some kinds which are white. Before it can be used in wearing, it is made to take one of three forms, being converted into either singles, tram, or organzine. The first consists in merely twisting the raw silk in order to give more firmness to its texture. It is made into trams by twisting together, not very closely, two or more threads of raw silk. Organzine is a fine cord formed by two of the above threads being wound on to another receiving a twist in an opposite direction. This is used by the weaver for the warp or length of the fabric. These processes are designated *throwing*; and are chiefly carried on at Macclesfield, in Cheshire, and in the West of England. The throwing mills are worked by steam-engines, and many of the throwsters are boys and girls. I said that silk in its raw state was of different shades and colours. These are not sorted, as the silk is scoured and dyed after it is thrown. It is then ready for the weaver, who forms it into cloth. This is done by interlacing one thread with another. Those threads which form the length of the cloth are called the *warp*; and the threads which cross the warp are called the *woof* or *weft*. The machine at which cloth is woven is called a *loom*. The warp is first prepared by winding off the threads from the reels, or bobbins, of the warping mill. It is then taken and stretched upon rollers. The weaver next raises, by a treadle and harness, one-half of the threads of the warp, separating them from the other half, and passes between them the shuttle, which carries with it the cross threads or woof. He then raises the other half, and the shuttle passing between them again the threads are interlaced. This is the most simple kind of weaving, and is called plain weaving. But the machines or looms by which cloth is woven are now principally worked by a water-wheel, or a steam-engine, instead of by hand. These are called power-looms; and without further trouble they perform every operation after the spinning till the cloth is made, with a great saving of time and materials. These are the general methods of spinning and weaving.

By attending to them we may better understand how silk and other fibrous substances are made into different kinds of clothing.

The bold contrast between the producing worm and the precious product, especially when the silk has been woven and made into garments, has been a favourite theme of moralist and poet. Milton asks—

“Wherefore did Nature pour her bounties forth
With such a full and unwithdrawing hand,
Covering the earth with odours, fruits, and flocks,
Thronging the seas with spawn innumerable;
But all to please and sate the curious taste,
And set to work millions of spinning-worms,
That in their green shops weave the smooth-haired silk,
To deck her sons.”—(“Comus.”)

OUR SUNDAY-SCHOOL ALBUM.

By ENOCH GRATTON.

(Continued from page 246.)

XXII.—MR. READYMAN.



He should have been very sorry if our album had not been favoured with a likeness of this worthy friend and devoted worker. He has won for himself an honourable place in the school and church; not because he has sought honour and distinction, but because everybody felt that he deserved it. Like that sensible stone of which the proverb speaks, he has shown himself fit for the wall, and therefore he has not been allowed to lie in the road. If the superintendent has a post of great difficulty to fill, a class of rough and headstrong boys to manage, a matter of any kind requiring promptitude, delicacy, and energy, he turns right to this friend for help, and finds, as he has often found before, that he is the right man in the right place. Mr. Readyman is like a soldier, who, when the moment for action has arrived, has his armour adjusted, his sword keen, his arm strong, his heart brave. When the cry is raised “The Bridegroom cometh!” he is not seen rubbing his eyes, yawning, and stretching himself like a half-awakened man. He is prepared for the coming. He has not to trim his lamp and seek oil; his lamp is trimmed and burning brightly. Who ever saw him hurriedly seize his Bible just five minutes before the time for school on Sunday morning to look up his lesson, ignorant until that moment what it was, or where it was? Who ever saw him cast a vacant look upon his class, and heard him say, “Boys, what lesson shall we have to-day?” The superintendent does not need to tell him from the desk what is the lesson in the “Notes” for to-day. He knows it, has read it, read about it, prayed it into his own soul. He has not only thought about, he has

thought it into his brain, into his conscience and will. It has become part of the life-blood of his moral being. As the flowers drink in the dew and sunlight, so his faculties and graces have drunk in the truth he has to teach to others. The lesson comes not simply from the "throat outwards;" he is no mere phrasemonger, a mere dealer in words and sentences. What he utters has the ring of reality and the "accent of conviction." His thought about his class is not limited to the time he spends in the class; throughout the week, and month, and year he is gathering truths and facts to interest and nourish the minds of his scholars; and, being a thoughtful man, a diligent reader, a careful thinker, a keen observer, he picks up many a precious lesson which others miss, and makes a capital use of points which to others are useless. He neither tries to shuffle out of his work, nor to shuffle through it in loose and slovenly fashion. One article of his creed is, that what is worth doing at all is worth doing well. He covets the best gifts; and the best gifts he has he wishes to use and cultivate for the glory of Jesus, and the good of his scholars. Dr. Guthrie once uttered words, the splendid spirit of which Mr. Readyman has largely caught. They are these: "I resolved to spare no pains, no toil, no time in careful preparation, in making my statements lucid, my descriptions graphic, my appeals pathetic, and in filling my discourses with what would strike and stick."

Temptations to neglect the school which are quite irresistible to Mr. Tardy and Mr. Wavering, have no power at all over Mr. Readyman; like shells hurled from an enemy's camp, they may fall at his feet, but before they can burst he picks them up and flings them away. If a teacher is really without a lesson in his brain and soul, although there may be many in the "Notes" and in the "Hive" and "Sunday-school Teacher," it needs no strong temptation to keep him away from his class: a slight cold, the call of a friend, a headache, a shower of rain, will be enough. The fact is, it is hard work talking when you have got nothing to say.

XXIII.—MASTER DICK RUDELY.

This is the likeness of a big, bold lad, whose boast is that he does not fear anything and does not care for anybody. He glories in being rough and troublesome. He scorns the idea of being even a bit polite; although he is only a boy, he has more cheek than half-a-dozen men ought to have. His face, as you may see, has upon it an expression of daring, his speech is rash and reckless, his manners are insolent and rude. It is almost impossible to shame him; he has a notion that it is large and manly to defy his father, to insult his mother, to annoy his teacher, and to create confusion and tumult in the class. He often does wrong knowingly; and while doing it he will look his teacher in the face in the coolest and most impudent style. On entering the class he gives no sign of respect for his teacher, makes no bow, utters no word.

If anybody is in his way, he does not say "Allow me to pass, please," but pushes them aside in the roughest fashion. If he sees a lady or an aged person standing, he does not rise from his seat and kindly ask them to take it—his maxim is "first come, first served." If he is at the table, he does not hand the plate first to his sisters or brothers; he believes in looking after "Number one." His attendance at school is not willing and cheerful. In fact, I know that he once said that he wished he could not read, for then he might not have to go to school at all. While the singing is going on I have been pained to see how the attention of others is diverted, and the sweetness of the singing impaired, by Dick's rudeness. While the most beautiful and solemn hymns are being sung he will laugh and talk, make foul faces and queer noises. The teacher is utterly at a loss what to do with him; certainly any man who has charge of Dick needs the patience of Job, the wisdom of Solomon, and the tenderness of John. It is certainly no easy thing to say what is to be done with this lad, or what he will do with himself. The promise is not bright; and it is no use shutting our eyes to the fact that many who were like Dick when they were lads have become really bad men, not only daring, but drunken, wild, and shameless. True, some who were not a bit better than Dick years ago have since turned out well; they are clever and courageous, and in every sense really splendid fellows; they display a bulk of manhood, a strength of purpose, a mindful, generous, noble disposition, which inclines us heartily to forgive their past rough and impudent behaviour. Let us hope, and pray, and labour that the lad whose carte you now see may throw off his uncouth and ugly habits, and become a gentle and heroic Christian. In spite of all his faults, there may be, yea, there is something good in Dick; he is like a nut with an exterior rough and prickly, but with a kernel sweet and sound.

If Dick's teacher should happen to read this sketch, I should like to say a word to him. Pray don't crush and bruise the nut—don't treat Dick harshly and bitterly. If you really can't manage him, and if there is in the school a teacher with more tact, more sympathy, more power than you possess—like an honest man, more concerned for the lad's good than for your reputation, ask the superintendent to put Dick into that teacher's class. But if you keep him in your class, don't beat him, don't pull his ears, don't awaken the demon of hate and revenge. By your gentleness try to make him great and good; think of the worth of his soul, of the price paid for its redemption, of its limitless capacity for good or evil, of the misery into which he may sink, of the harm he may do. Talk to him alone, try to win his respect, notice anything good that you may see in him, pray for him often and fervently, and *do your very best to save him*.

If Dick himself, or any of Dick's cousins, should read this sketch, I hope they will permit me to say a word or two to them. Be assured that to be rude and insolent is not the way to be manly and great; it is rather the way to be mean, and small, and hateful. The

greatest heroes have ever been gentle and kind ; in them, courage and tenderness have met and mingled. They did in David, the noble youth who rescued his lambs from the grasp of the lion and bear. They did in the three Hebrew youths, who quailed not in the presence of an enraged king and at the sight of a burning fiery furnace. We like to see a lad with plenty of pluck, and spirit, and energy ; at the right time, and in the right place, we delight to see lads romp and play, and we are rather fond of romping with them. But in the school do try to be attentive and steady ; to the aged and deformed, especially try to be gentle and considerate. And at all times, and in all places, try to act like intelligent Christian lads. If you cannot be rich and famous, you can be true, and loving, and pure. Will you really try ?

BAND OF HOPE PAPER.

AN ADDRESS FOR A BAND OF HOPE MEETING.

DEAR parents and friends, I am glad you are here

At our Annual Band of Hope Meeting ;

On behalf of our members and officers dear,

I'm requested to give you fair greeting.

We are not to explain how our meetings are held,

And the objects we strive to attain ;

And in this way your sympathy, interest, and prayers

We hope ere we close to obtain.

Our object's a good one, and you will agree

With our principle ; for I feel sure

That none can dispute the old adage's truth

That " prevention is better than cure."

'Tis our wish to be kept from the drink and its curse,

And the increase of drunkards to stop ;

Now there's only one way that is perfectly sure,

And that is not to take the first drop.

It is certainly clear if we keep to our pledge,

We can ne'er become drunkards at all ;

And teetotalers are safe from full many a snare,

Which with others results in a fall.

And besides their own safety much good has been done

By what Band of Hope children have said ;

Wretched fathers and mothers have given up the drink

By the words of their little ones led.

Then parents look kindly on our Band of Hope,

And don't keep your children at home ;

They may learn something now that will keep them from harm

In many a long year to come.

You teetotal parents can have no excuse
 For declining *your* children to send ;
 If you'd have them grow up strong in temperance rules,
 Oh, let them our meetings attend !

And if you, who yourselves do not wholly abstain,
 Of the risks of the habit once think,
 I feel sure you'll consent to your children being trained
 To shun and avoid all strong drink.

Let them come then and join us, there's nothing to pay,
 They are welcome no matter how poor ;
 All we ask is that they shall be tidy and clean,
 And we turn away none from our door.

Our meetings are cheerful, and not at all long,
 The children take part in them too ;
 We sing and recite, and the grown-up folks talk
 And tell tales of what children may do.

To you who have no little ones of your own,
 But agree with our objects and aims,
 I would say, come and join us with hearty goodwill,
 And this evening pray give in your names.

There is plenty of work for each one if you'll come,
 Do not leave it to fall on a few ;
 There is something perhaps that requires to be done
 Can be only done rightly by you.

And remember, if only one home you reform,
 One man by your efforts reclaim,
 The good that results shall eternally live,
 Though forgotten by men be your name.

For you know Jesus said, what's for little ones done,
 Though the least one, is done for their Lord,
 And at last, when His servants are all gathered home,
 " Good and faithful " shall be your reward.

TOM BROWN.

RUTH'S GOOD FORTUNE.



HE day was a very hot one in July. No one had felt it more than Ruth Warford, for she had been toiling all day at her sewing-machine in a close suffocating room at the warehouse. Tired, weary, and almost worn out, she was now dragging her weary limbs homewards, but only to a poor miserable home. Not that it was her mother's fault. No. Mrs. Warford did her utmost to make things look comfortable, but then, poor old body, even when she had done

her utmost, there was hardly anything to be seen for her pains, because they had very little furniture in the house. But what was lacking in this respect was made up in love between mother and daughter. It would have done you good to have seen Mrs. Warford, when Ruth came home at night, take her daughter's shawl off, place a chair for her, and then bustle about to get her a cup of tea.

"Mother, did you water my musk plant this morning?" spoke Ruth, slowly sipping her tea.

"Yes, love; I didn't forget same as yesterday morning. And how nice it looks! When are you going for the other, Ruth, dear?"

The other that Mrs. Warford alluded to was a young rose-tree. Mr. Milne, a gentleman in good circumstances, and belonging to the chapel that they attended, had taken an interest in Ruth and her mother, and knowing Ruth's attachment to flowers, he presented her with the musk, and also promised her another plant if she would go for it. Now this was what Ruth did not like to do. She was not accustomed to visit those out of her own sphere, and, therefore, the fetching of this rose-tree from Mr. Milne's troubled her not a little.

"I wish you would go to Mr. Milne's for me, mother; you know you can talk to them better than me, and I am sure he will excuse me," said Ruth, casting an appealing look across the table.

"Now, dear, what did Mr. Milne say the very last time I saw him? He said this: 'Tell Ruth to come for the plant herself, or else I shall keep it.' That's what he said. Besides, I know he wants you to go, because it will be a change for you." And Mrs. Warford, when she had finished speaking, went up to her daughter, and playfully tapped her on the cheek.

"Well, I'll go," said Ruth, with a sigh; "but I don't half care for the journey."

Poor Ruth, she spoke nothing but the truth. To her it was a great effort going to Mr. Milne's fine house. To be sure they made her very welcome, but then it was the mixing up with people in fine clothes, and stepping into beautifully furnished rooms, and listening to conversation which seemed far out of her reach, which perplexed her and made her uneasy. And there was another reason too. It made Ruth think of the home she had left; it brought to her mind the bitter struggles she and her mother had had to encounter many a time; the many sleepless nights they had passed through because they had no food in the house to silence their gnawing hunger.

"I think, mother, I will go to-night," said Ruth, after a long pause; so, after resting a little while longer, Ruth got herself ready.

Mr. Milne's house was in a very healthy part of the town, about two miles from where the Warfords lived. He had a large family, mostly grown up, so, therefore, he required a large house. Clara, the youngest of his daughters, had taken an especial liking to Ruth

since her first visit. Clara was one of those bright-eyed, fair English girls that you meet with sometimes whose joyous laughter would ring in your ears long after she had vanished from your sight. As Ruth approached the house Clara ran to meet her.

"Oh, you naughty Ruth, why haven't you come sooner than this?" cried she, catching hold of Ruth's hand and attempting to pull her along.

"Well, you see, little miss, it isn't long since I left business," replied Ruth, gently.

"And do you feel tired?" said Clara, stopping, and playfully stroking Ruth's face with her hands. Tired? Ruth could hardly keep the tears back at this question, for it was so unusual for her to be anything else.

"Good evening, Ruth," exclaimed Mr. Milne, as she entered the drawing-room; "I was hoping you would come to-night because I did not see you at chapel last Sunday."

"I was very poorly, Mr. Milne, and I did not get up till dinner-time."

"Very poorly, my dear girl? Why, what was the matter with you?"

"Well, I think the room I work in is so close, and we have been so busy lately, and it has made me so weak." Ruth spoke this in broken sentences, for, poor lass, she did not want to tell a plaintive tale to Mr. Milne. No, she would far rather hide her sufferings."

"Well, now, we must make Ruth feel better before she goes home," said Mr. Milne, cheerfully; "so, Clara, dear, suppose we have a game at 'Proverbs.'"

Clara ran for the cards, and whilst they are having this game we must go back to Ruth's home and see what is taking place there.

During her daughter's absence Mrs. Warford had a visitor. This visitor was a Mr. Tait, who was in want of a young lady to superintend his wholesale skirt department. Mr. Tait had had Ruth recommended to him by Mr. Milne, but the last-named gentleman had never spoken a word of this to Ruth; he intended it as a pleasant surprise for her. Mr. Milne was in the habit of providing pleasant surprises for his friends in this manner; whenever he could do a good turn he thought it his Christian duty to do it.

"So your daughter is out, Mrs. Warford, is she?" said Mr. Tait, in reply to his question. "I should like to have seen her; but, however, ask her to call at my office in Bedford Street as soon as she can. I have no doubt the situation will suit her, and I am sure your daughter will give me every satisfaction."

Mr. Tait left Mrs. Warford in a pleasant state of mind, and when Ruth came home, and the gratifying news was told her, you may rest assured, that it would revive her drooping spirits.

"And he is such a nice gentleman, Ruth," said Mrs. Warford, after she had told all; "and I am sure he will be a kind master to you."

"But, mother, you haven't told me what salary I am to have," replied Ruth, smiling at her mother's enthusiasm.

"Oh, to be sure, love!" cried Mrs. Warford, laughing too. "Well, you are to commence with a guinea. Fancy that! And now, work as hard as you can, you can't earn more than twelve shillings. And he says that when you have been with him six months he shall give you five-and-twenty shillings a week. Why, Ruth, our good luck is coming all at once, isn't it?"

"It looks like it, mother. However, I hope I shall give Mr. Tait every satisfaction, for it is exceedingly kind of him giving me the first chance."

Ruth and her mother did not forget to bend the knee in prayer to Him who rules the great universe, for thus providing for their wants in this unexpected manner. God had truly been good to them; even in their direct poverty He had given them contented minds and loving dispositions towards each other; and now He was going to add to His former goodness by placing Ruth in a more lucrative situation.

Ruth has been in her new place some years now, and she has continued to please her employer by the close attention and untiring zeal which she has given to his business. And, of course, Ruth and her mother are not so close pinched for food and clothes as they were formerly, and their house also bears a more healthy and cheerful look.

* * * *

This little incident ought to serve as a moral for us—never to be dissatisfied with our position in life. God does everything for the best, and he is the best and noblest Christian who bears the yoke patiently that his Maker has placed upon him. Depend upon it, He will never desert us if we keep faithful to Him, and when least expected His blessings will fall and enrich us, like the refreshing showers that visit the parched earth.

S. FOSTER.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

OCTOBER.

MORNING SUBJECTS.			Golden Texts for Repetition.
SUBJECT.		FOR READING.	
FOURTH QUARTER.			
7	Jehovah feeds His People	Exod. xvi. 1—13...	John vi. 33.
14	Israel at Rephidim.....	Exod. xvii.	1 Cor. x. 4.
21	Israel at Sinai.....	Exod. xix. 1-11, 20-26	Gal. iii. 24.
28	The Ten Words.....	Exod. xx. 1—21....	Matt. v. 17.

AFTERNOON SUBJECTS.			Golden Texts for Repetition.
	SUBJECT.	FOR READING.	
	FOURTH QUARTER.		
7	Paul at Cæsarea.....	Acts xxi. 1—19 ...	xx. 24.
14	Paul at Jerusalem	Acts xxi. 27—40...	John xv. 20.
21	Paul and the bigoted Jews	Acts xxii. 1-3, 17-30	Rom. x. 21.
28	Paul before the Council...	Acts xxiii. 1—21...	Luke xxi. 15.

NOVEMBER.

MORNING SUBJECTS.			Golden Texts for Repetition.
	SUBJECT.	FOR READING.	
FOURTH QUARTER.			
4	The People's Sin.....	Exod. xxii. 1—20...	1 Cor. x. 14.
11	Moses' Intercession	Exod. xxxiii. 1-3, 17-23	2—23] Dan. ix. 9.
18	The People's Offerings...	Exod. xxxv. 20 to xxxvi. 7]	2 Cor. ix. 7.
25	The Tabernacle set up ...	Exod. xl. 17—38..	John iv. 24.

AFTERNOON SUBJECTS.			Golden Texts for Repetition.
	SUBJECT.	FOR READING.	
FOURTH QUARTER.			
4	Paul before Felix	Acts xxiv. 10—27	ver. 25.
11	Paul before Agrippa	Acts xxv. 23 to xxvi. 18]	Matt. x. 19.
18	Almost persuaded	Acts xxvi. 19—32	ver. 28.
25	Paul in the Storm	Acts xxvii. 1—26	Psa. lvi. 3.

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

1. A KING, in the third year of whose reign there came a king of Babylon to besiege Jerusalem.
2. A prophet who said, "Behold the Lord cometh with ten thousand of His saints."
3. A man of Rehoboth who was king of Edom.
4. The father of the overseer of King David's storehouses.
5. A man full of faith who was chosen to be a deacon at Jerusalem.
6. The violent taking away of what caused a reproof which was given by one of the patriarchs.
7. One who rescued a prophet out of a miry dungeon.
8. One who smote a prophet of the Lord and put him in the stocks.
9. A city of which it was said that the ships of Tarshish did sing in its markets.

Take the initials of each of the answers and you will find a most touching instance of Christ's love.

Poetry.

THE MOUSE FAMILY.

NEVER an odder house
Need Gold-locks wish to see
Than that in which Mrs. Mouse
Lives with her family ;
The way she builds it is to gnaw
Bits of paper and cloth and straw,
And to carry them slyly, mite by mite,
Into some corner out of sight ;
A nibbled heap of odds and ends
'Twould look, perhaps, to my little friends ;
But, nevertheless, it is warm and nice
For Mrs. Mouse and the little mice.

These baby-mice are queer,
Tiny, naked and pink,
With ears that cannot hear,
And with eyes that cannot wink ;
But they grow fast, as children do,
And, after a little, comes to view
A soft dun coat on every back ;
The blind eyes open bright and black ;
The ears prick up, all curved and keen ;
The paws are as dainty as ever seen ;
And when they are old enough there grows
A tender whisker on every nose.

And Mrs. Mouse is proud
Of their playful, pretty ways,
Though they nestle and squeak and crowd,
Nor listen to what she says ;
Lucky for them when they do creep out
From their quiet nest to look about,
Bold and pleased and eager, if that
Soft furred, purring pussy-cat
Be not near, or if no mishap
Befall in form of a baited trap
Ready hungry teeth to entice !
Dangers are plenty, little mice !



MOTHER AND CHILDREN.

MOTHER AND CHILDREN.



OUR picture this month presents to us objects with which we are all familiar, but which never become to us uninteresting. There are indeed churls in existence who treat little children with indifference, or it may be with scorn. We are, however, glad to believe that they do not form a numerous class. Most love little children, and from their presence derive purest delight. "A babe in the house is a well-spring of pleasure." It is so undoubtedly to a mother's heart. How she doats on her little ones! With what rapture she gazes into their eyes, or clasps them to her bosom! What a celestial paradise they make her home! True, there is another side to the picture. At times they try her patience, awaken her anxiety, and tax her powers of endurance. But she loves them for all that, and in her maternal affections finds the most satisfying earthly joy her heart can know. Happy are the children who have a true mother!

How many of our readers have had such a mother? How few of our readers have not had such a one? Every mother may not have been the best of mothers, but most mothers expend an amount of care and love on their children which make those children ever their debtors. Have we ever asked ourselves what we owe our mother? What esteem? what love? what dutifulness? if we are still living at home, grown-up boys and girls. And are we trying to pay our debts to her? We trust that all the youthful readers of the INSTRUCTOR are striving to do so. If not, we hope they will at once turn over a new leaf, and begin to be to their mother all that they ought to be.

You look at the children in the picture; you see how their mother lavishes her love upon them. How can you suppose these sweet babes ever to be rude, peevish, naughty children to that mother? Well, such transformations do take place, and, instead of her darling boy or girl being "a well-spring of joy" to her, the mother finds "how sharper than a serpent's tooth it is to have a thankless child."

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of "A Year at School," &c., &c.*

Letter No. 59.

FROM BEN BARLOW to ERNIE INSTONE.

Waterside House, Worcester,

October 28th, 187—.

MY DEAR ERNIE,—

I am glad the couple of rabbits I promised you reached you safely. Who do you think brought them? Why, my father! He had to be in London at some operation (I suppose they were cutting somebody's leg or arm off), so he offered to bring the rabbits for you.

You need not have troubled to thank me so much. If you were nearer, you might have half-a-dozen rabbits, and I should hardly miss them. I hope you will be more successful in keeping your pets safe this time. Mind they have a nice warm bed now it is getting cold weather.

With kind regards to your pa and ma, I remain, yours affectionately,
BEN BARLOW.

Letter No. 60.

FROM TOM BLUNT to BEN BARLOW.

Old Mill, Woodbourne,

November 6th, 187—.

MY DEAR BEN,—

How did you keep up Gunpowder Plot yesterday? We had a grand day of it here only for an accident. I will tell you how it was.

As usual the master gave us a half-holiday. Well, we bolted our dinners as quickly as we could, and then set out to beg coals for the fire. We didn't have to go far. Father gave us a basketful to start with. Your father gave us another, but told us not to come to him to have our heads stitched on again if they got blown off with the gunpowder. We had some more coals from the rectory, a lot of chips from Mr. Slim, the auctioneer, and half-a-dozen boxes of matches from Mr. Wayches, the grocer.

We had been saving our money for some weeks, and the night before, three of us went to Hammerthorpe to buy the ammunition. We got three-and-sixpence worth of rockets, wheels, serpents, and coloured fire, and about a pound and a half of loose gunpowder. John Williams had found an old-fashioned horse pistol in their lumber room. Edgar Foster brought an old gun-barrel. I had found two or three pieces of iron piping, which I took to the shoeing-

forge, and got the lad there to flatten the ends, and file a prime hole in each.

Well, before three o'clock we had got a good blazing fire on the waste land just outside your father's garden wall. As it was too light to show fireworks well, we set about charging and firing the pistols. Mr. Jones came to have a look at us. He examined all the pistols, and told us not to put big charges in them. He also warned us to point the pistols towards the blank wall every time, and never to fire one without a wet fuse, which he showed us how to make. If we had done as he told us, we should have been all right.

We fired away nearly all through the afternoon, first one pistol and then another. It was as if the French were bombarding the village. About six o'clock it got dark, and we ceased firing the pistols, and let off the fireworks. The first few rockets were seen from the village, and we soon had a crowd of folks to see the others. We fixed the wheels on one of the posts of a fence. To finish up, we sent half-a-dozen "crackers" bursting and spitting along the ground among the folks. You may guess there was a pretty screaming as they tried to get out of the way.

We had finished all the fireworks, but there was a bit of gunpowder still left. I wanted them to make it into a wet fuse and fire it on the top of a post; but Edgar Foster wanted to charge his gun-barrel once more. The powder belonged to him as much as to me, so he set about charging it. The lad from the forge had come to see the fun, and he advised Edgar to put a good charge in for the last. Edgar handed the weapon over to him, and notwithstanding what the schoolmaster had said, he rammed the gun-barrel full of stone and cinders right up to the end.

We had kept a few grains of gunpowder for the prime, but not enough for a fuse, so after clearing the people out of the way, Edgar touched it with a red-hot poker. The prime flashed but the gun did not fire, so, after leaving it for a few minutes, we took it up and examined it. The prime was all gone, and we had no more gunpowder to prime it with, so how to fire it we did not know.

At last the forge boy advised us to put the end in the bonfire, saying it would go off as soon as the end of the barrel got red hot. Well, we did; but we waited and waited, and it seemed as if the pistol never would fire. Some said the powder must have dropped out of the barrel before it was rammed down, and others said it had already fired, but had not got strength enough to force out such a tremendous charge.

We were just considering whether we should fetch the barrel out of the fire, and Edgar Foster and the blacksmith's lad were creeping up to it to try to see if the iron was getting red hot, when all of a sudden there was a fearful explosion.

Foster and the other lad fell like as if they were dead, and nearly all of us were burnt more or less by the hot embers, for the whole bonfire seemed to go up into the air and come down in showers of fire.

Edgar Foster was found to have fainted with the fright, and his hands and face were burnt sadly. The blacksmith's boy was burnt quite as much, and besides that, he had the first finger of his left hand blown off. It was a frightful finish to the day's enjoyment.

I have just come from seeing Edgar. He is not burnt quite so badly as we thought. Your father says he may escape without any scars on his face. I had two or three blisters from the hot coals, and so did nearly all of us, but that of course is nothing to what it might have been. You see, the gun-barrel burst from end to end, and, as Mr. Jones says, there might have been half-a-dozen of us killed.

I hope you had your fun without any mishap. Remember me to your friend Instone, yours truly,
TOM BLUNT.

Letter No. 61.

From Dr. BARLOW to BEN BARLOW.

The Laurels, Woodbourne,
November 7th, 187—.

MY DEAR SON,—

How many bones did you get fractured the day before yesterday? Your mother wants to know. I tell her you did not get killed, or I should have been invited to the inquest before this. We had a grand day here! After it was over, I had more than an hour's work bandaging heads, dressing blisters, and plaistering burns, besides amputating half a finger.

I was foolish enough to countenance the folly by giving some coals towards the bonfire; but it is the last time. I'll present them with a roll of sticking-plaister next year. It will prove a lesson to everybody here, I should think.

There is one good thing about it, the folks who were most hurt were those who were most to blame. The very idea of plugging a gun-barrel to the very muzzle! From what I can learn, the charge would have been enough for a small howitzer!

I hope *you* escaped without any accident, but it will be some satisfaction to your mother to know that you have still the regulation number of limbs and joints. So on your next half-holiday try and find time to write to her. With love from us all, your affectionate father,
OLIVER BARLOW.

Letter No. 62.

From Mr. INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park,
London, November 9th, 187—.

DEAR MASTER BARLOW,—

I write to thank you for your very handsome present to my little son Ernie. The rabbits are a source of continual and increasing

interest to him. He at once concluded that it was you who sent them ; but, until he got your letter, we had no idea how they had come.

We very much regret that your father did not give us the opportunity to thank him personally for his kindness. We can only forgive his not calling on the supposition that his professional engagements did not leave him sufficient leisure.

Will you please tell him that we are very desirous to make his acquaintance, and that we hope he will never omit calling on us when he is in town ?

Again thanking you for Ernie's present, I am, yours respectfully,
ALBERT INSTONE.

Letter No. 63.

From BEN BARLOW to Mrs. BARLOW.

Waterside House, Worcester,

November 11th, 187—.

MY OWN DEAR MOTHER,—

From a letter I got from father, I suppose you have been just a bit frightened lest I might have been hurt on the 5th of November. We had a jolly bonfire and lots of fireworks, and yet not one of us got hurt. I was very sorry to hear of the accident to Edgar Foster, though I wonder he wasn't hurt worse, and a lot more fellows besides.

Please tell father I have had such a nice letter from Mr. Instone. He seems put about that father did not call to see them, and he tells me to beg of him not to forget to do so when he goes to London again. I hope father will go there, for they are pleasant people, and, besides, I want them to see what a clever man he is. I should like you to see them too, mother ; I am sure you would like Mrs. Instone.

I have also had a letter from Ernie himself. He is very pleased with the rabbits. He says they make themselves quite at home already.

Please give my love to father and Clara and Helen, and to Bob. Ted also wishes to be remembered to you all. With a lot of love to yourself, I am, your own son,
BEN.

Letter No. 64.

From BEN BARLOW to TOM BLUNT.

Waterside House, Worcester,

November 15th, 187—.

DEAR TOM,—

Many thanks for your long letter. It was sad to hear of the accident on bonfire day, though it did seem to serve the blacksmith's bad right ; for if he hadn't interfered, the barrel might not have been

loaded so full. I should think they won't let you have a bonfire next year. Father seems to be set against it, and I'm afraid the rector and the schoolmaster will be.

We had no accident at all. But then Dr. Tasker was very strict and would not let us do as we liked.

We had a half-holiday of course. Well, it was as good as a whole holiday, for instead of regular lessons, the doctor had us all in the schoolroom, and gave us an hour's lecture on Guy Fawkes and the Gunpowder Plot. It was grand. When he tells us history it is just like seeing the events he talks about. Well, after that Mr. Macpherson gave us a short lecture about gunpowder. He told us how it was made, and how fireworks were manufactured, and told us what dangerous things they were.

Then Dr. Tasker told us on what conditions we were to keep up the memory of Gunpowder Plot. He said he liked it when he was a lad, and he did not wish to keep us from enjoying it. We should have a bonfire in the playground, and he had bought a small load of coals for our special use. But he would not have a single pistol of any kind fired off. He said nine out of every ten of the accidents on bonfire day were caused by pistol firing; there was nothing pleasant in seeing them fired, and the incessant reports of such explosions were a public nuisance. He thought sky-rockets, princes' feathers, and Catherine wheels were very beautiful, and we might have as many of those as we liked. But as even these were not without some danger, not a single one was to be fired except under the direction of Mr. Macpherson, who understood such things.

Well, we did not at first like being tied down to fireworks; but I think we all thoroughly enjoyed ourselves after all, and now that we know what happened at Woodbourne, both Ted and I think the Doctor was very wise to be so strict.

Before it got dark enough for the fireworks, Mr. Macpherson set about making an effigy of Guy Fawkes. We found an old coat, a pair of trousers, and a hat, and stuffed them with straw like the farmers do the bird-scares. Then we tied a lantern to one sleeve, and a match-box to the other, stuck a pipe in his mouth, and tied a paper round his hat with the inscription—"A real guy."

When it got darker we fixed the rockets and squibs in Guy's hat to fire them, and at last we put him bodily on the fire, and he perished amid a blaze of fireworks. Besides the rockets and wheels, we had half-a-dozen small fire-balloons which Mr. Macpherson made. He is clever.

When all the fireworks were gone, and we thought all the fun was over, the Doctor sent us out a peck of nice big potatoes and a bag of beautiful apples. These we roasted nicely in the spaces underneath the bonfire, and we had a glorious supper of two courses, I can tell you. The best of it is that if anyone *did* get burned at all, it must have been the roasted apples that did it, and not the gunpowder.

Give my kind regards to Thornton when you see him, and to all inquiring friends. Ted also sends regards. Yours truly,
BEN BARLOW.

TOM FOSTER, THE ORPHAN.

BY CHARLES LEACH.

CHAPTER XVIII.—A CHANGE.



WE must here draw the curtain over much of Foster's life. We need only say that he sank into the lowest depths of poverty through his drinking habit.

We proceed to narrate an event which changed the whole course of his life, and led him back to the paths of virtue.

One Sunday evening as he passed along the street hardly knowing or caring where he went, he had the good fortune to pass a place of worship. The service was just commencing. As he passed the front there came through the open door a wave of sound which arrested his attention. He listened. It was an old familiar tune, one that his mother used to sing to him when a lad. He almost thought he could hear her voice among the worshippers. All the thoughts which passed in his mind in those few minutes it is impossible to tell. The singing ended. As the last strains passed he appeared a little disappointed. He would have heard more, but all was quiet. The minister was engaged in prayer. He was about to turn away, when a hand was placed upon his shoulder, and a voice said, in very kind tones :

"Good evening, sir! Shall I find you a place in our chapel to-night?"

The speaker was a woman past middle age, with a voice full of kindness, and eyes running over with love. Her gentle touch and soft words had rather startled Foster, coming as they did so unexpectedly. He looked right in her face, and for a moment thought he knew it, but could not be sure. Touching his old hat rather politely, he thanked her, and, declining her offer, was about to pass away.

"But," said she, "I am sure you will like it. The chapel is nice and warm. I will find you a book, and you can sit with me just inside the door. Do come!" continued she, gently taking hold of his arm and moving towards the chapel door. He offered no resistance, and was soon at the entrance gate. Here, however, he looked at his old clothing and worn-out shoes, and was about to offer an objection, when the door opened to allow late comers to enter. A few minutes later he was comfortably seated in a pew with a hymn-book in his hand. Once or twice he looked round at the chapel. It was small, but neat. There was a good congregation, and all seemed to

be happy. When the chant was finished the preacher announced the 15th chapter of St. Luke as his lesson.

The lady passed him a Bible opened at the lesson, but he could not look at it. His eyes were fixed upon the preacher. He was sure he knew that face. He leaned forward as if to get a nearer view of him. The preacher read his lesson well. Foster was interested. When he heard the three parables read he could not help feeling very strange; the last of the three especially took hold upon him.

When the lesson ended, with tears in his tears, he leaned across to the lady, and said, "What is the minister's name, please?" "Mr. Strong," replied she. "Mr. George Strong?" asked Foster. "Yes."

Then it was as he had thought. The preacher was his old friend George Strong, the country lad whom Foster had taught to pray many years before. Placing himself in the corner of the pew, he hid his face in his hands and wept such tears as none can describe, and none understand but those who have wept the bitterest tears of repentance.

Like a moving panorama all the events of his life passed before him. He saw what he might have been, he saw what he was. He remembered how he had broken the solemn promises which he had made his poor mother years ago. He saw, too, how he had wandered into sin, slighted the mercy of a loving God, and brought disgrace and misery upon himself. In that pew he drank a bitter cup; but God, who is ever merciful, threw into it the sweets of His love. As he sat in that corner, hearing very little of what the preacher said, God converted his soul, and enabled him to resolve that the future of his life should be spent in efforts to redeem the past.

In the prayer meeting which followed the sermon, penitents were invited to kneel round the communion that good men might instruct them in the way of salvation. Without a moment's hesitation Foster went and knelt before George Strong, who recognised him, though so many years had passed since they last met.

CHAPTER XIX.—CONCLUSION.

When the prayer meeting ended, George Strong took Foster to his home. Each explained to the other as briefly as possible the chief events of his life. Strong and his mother were both led to be religious as the result of Foster's visit to them. George had learnt book-keeping and took a situation in Liverpool. He and his mother, whom he now supported, had come to live in Liverpool. He had become a useful and acceptable local preacher.

When poor Foster told his sad tale all three wept. He gave it about as we have given it, and finished by saying that he deserved it all and more, but would not have cared so much had not Mr. Trueman sent him away as a thief.

"Mr. Trueman!" said George, in astonishment; "why, that is the very man for whom I work. Cheer up, man, all will yet be well."

The next day George sought an opportunity to speak to Mr.

Trueman in his private office. As well as he could he pleaded for Foster when he had stated the case. Mr. Trueman, however, needed very little pressing. It came out that for some time he had been making inquiries for Foster. When Barker and Foster were dismissed it occurred to the master that he ought to have investigated the settled note affair before turning them away. He did so after, and as the result of his inquiries found that the money had been paid to Barker by the boy as above detailed. Carefully comparing the writing with other writing of Foster's, he found that, whilst it was a good imitation, it was not Foster's. The rest he guessed, and was anxious to find Foster.

A day or two later, Foster, dressed in a suit of clothes purchased for him by George Strong, presented himself, at the request of Mr. Trueman, at the old firm. The master was much moved when he saw and heard Foster's account. "All this," said he, "is the result of bad company." He then re-engaged Foster, who after a few weeks spent at the house of his old friend Mr. Wood, where he was surrounded by the kindly influences of a Christian family, went back to his situation a changed man.

George Strong was his constant companion and looked after him with all the love of a brother. They lived together, slept together, and worshipped together.

Foster soon regained his master's confidence, and never more gave him reason to suspect his honesty. He joined the religious society of which George was a member, and ultimately became a local preacher.

It remains only for us to add that he made for himself a comfortable home, took to it a wife, and with her and his children lives in the bonds of peace and Christian affection. He is now a respectable and useful man, but has not forgotten the struggles of Tom Foster, the Orphan.

THE END.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXI. — OXEN.



OF all domestic animals these are the most useful and important. They are regarded with strong general as well as agricultural interest, and the mere mention of the manifold services they render to us will show that they are entitled to all the attention they receive.

The milk and butter and cheese which the cow supplies enter into our everyday diet, and are indispensable to our comfort and health. The "roast beef of Old England" has been surrounded with quite a halo of sentiment by the song-writers, and is indeed a most venerable and important institution. In Northern countries

like ours, where animal food is necessary to sustain a strong and healthy physique, it is a most valuable article of diet. But though the supply of nutritious food is the chief service rendered, there is no part of the ox that is not of some use to us. The hair is valuable in various manufactures, and the hide when tanned supplies us with the material for our boots. The fat and tallow are used for candles. Saddlers use a fine sort of thread prepared from the sinews, which is much stronger than any equally fine, and serves to hold together the most important part of that harness without which horses would be wild and unmanageable. The blood is used as the basis of the common colour known as Prussian blue. The thinnest of the calves' skins are manufactured into vellum, a material much used for title-deeds and other legal documents. The bone is a cheap and efficient substitute for ivory, and is often so cleverly prepared that only the practised eye can distinguish the one from the other. The dung is useful as manure, and greatly enriches the soil; it is also extensively used in dyeing. Strong glue is made from the tendons, cartilages, and gristle. A coarse gelatine, used in the manufacture of lace, is obtained from the cellular membranes. From the feet a valuable jelly is prepared for invalids; as also an oil, called neat's-foot oil, much used for softening leather and other similar purposes. Boxes, combs, knife-handles, and drinking vessels are made from the horns. These when softened become so pliable as to be formed into transparent plates for lanterns. They are not so transparent as glass, but are more serviceable for rough work; a hard blow will no more break them than it will break a piece of leather. These plates were first invented by Alfred the Great, who used them to preserve the candles by which he measured the lapse of time from the uneven combustion caused by fluctuating draughts and winds.

It is frequently pointed out by scientific men that throughout all Nature the strictest economy goes hand in hand with the most prodigal bounty. The various orders and ranks of being have such exact relationships towards each other that waste is impossible. Men are beginning to learn the lesson great Nature teaches, and in their use of the ox we see a good illustration of the way they endeavour to turn to advantage every possible capability of the gifts a bountiful Providence bestows. "Waste not, want not" is a motto as good as it is old; and to act upon it is to follow out a Divine plan.

But the goodness of God is not only seen in giving for our use such useful creatures, but also in the wide extent of the gift. In varying species oxen flourish all over the world; and they are always found abundant in countries that are thickly populated. They have flourished in our country as far back as history can definitely speak. Julius Cæsar, who made a descent upon our island fifty-four years before the birth of Christ, speaks of the great numbers of our cattle, and describes how the wild barbarians neglected tillage and lived on milk and flesh. With good pasturage cows will yield a large quantity of milk. The grass and herbs of English fields are

very suitable, and hence cows thrive with us remarkably well. In Cheshire large herds of seventy, eighty, and even a hundred are a very common sight roaming at will over immense fields of a luxuriant verdure; and the butter and cheese made in this picturesque and beautiful country will compare favourably with that made in any other part of England, or of the whole world. There are peculiar kinds of cows in the Channel Islands. Alderney, Guernsey, and Jersey have each its own sort, and very beautiful creatures they all are. They are generally small, but give a large quantity of rich milk, which makes beautiful butter of a dark yellow colour. What is commonly called the Alderney cow in England is really the Guernsey cow. Alderney is little more than a large rock with extensive fortifications, and very few of its cows are ever exported.

These animals are all the more serviceable on account of their obedient and tractable disposition. They are uniformly staid and serious in their demeanour, and, with very few exceptions indeed, never indulge in naughty or rebellious tricks. They seem to recognise the useful functions they are called to fulfil, and with a humble and patient perseverance endeavour to do all that can be reasonably asked of them. The bulls, indeed, when excited grow furious, and by their amazing strength can inflict great damage when they lower their heads and rush forward to catch between their terrible horns the object of their displeasure. But the cows, which are the most useful, and which in point of numbers form an overwhelming majority, are very seldom incensed, and even the wildest of bulls are generally capable of being managed by skilled and careful herdsmen.

In the simple agricultural life of ancient Oriental natives no animal was held in higher esteem, as certainly none were more useful or more necessary. Upon his patient labours all farming operations depended. It was his strength that drew the plough through the furrow, and that trod out the corn after the fields had been reaped. For all purposes of draught oxen were used, being generally yoked in couples; also as beasts of burden. The ox did what we regard as his proper share of labour, and, besides, discharged the duties which we lay upon horses alone. It was his great usefulness probably that led to his being deified. Both India and Egypt abounded with sacred cows, which occupied important places in the elaborate idolatries of those nations. It was probably in imitation of ceremonies they had witnessed in Egypt that the Israelites made the golden calf which they adored in the wilderness. It was probably in imitation of the idolatrous nations around him that Jeroboam set up the golden calves at Bethel and Dan. A bovine worship offered more inducements to the ancient people of God than the spiritual service of the Most High. Does not this show the depravity of the human heart? God's very best gifts—the sun to enlighten, the ox to feed us and toil for us—instead of constraining men to the love and service of God, have been made into idols, and drawn the heart further away from the Giver of every good and perfect gift.

In proof of the wisdom of the Creator it is worthy of remark, that throughout the almost innumerable varieties and species of the ox, every modification of the structure of the animal has a direct reference to its locality and circumstances. The result is that it thrives on the frozen fields of Iceland and in the burning desert of Lybia, and the wants of the populations of all the countries between those two extremes are supplied. Only infinite power and wisdom could adapt the same animal to such different diet and air and conditions.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

XI.—PRODUCTS OF SKILLED LABOUR.—COTTON.]



AMONG all the materials which the skill of man converts into comfortable and elegant clothing, that which appears likely to be most extensively useful, though it was the last to be generally diffused, is the beautiful produce of the cotton plant. This material bears so much resemblance to the earlier-known article of sheep's wool, that among the ancients it was called the "wool of trees;" by the Germans it is called "baumwolle," or "tree-wool;" and in our own language it bears the name of cotton wool, though the properties of this vegetable substance differ greatly from those of the animal fleece.

Cotton is a vegetable down, the produce of plants and small trees growing in warm climates, and indigenous in India and America. Cotton will not grow in England, the climate of our country not being sufficiently warm. The common cotton plant grows in the East Indies to the height of three feet, and has leaves of a bright dark-green colour. Its blossom expands into a pale yellow flower, with five red spots at the bottom. When the flower falls off a pod appears, which, when fully developed, is about the size of a walnut. The expansion of the wool then causes the pod to burst, when it discloses a ball of snow-white or yellowish down. A field of cotton at the gathering season is singularly beautiful, and in the hottest countries, where the yellow blossom or flower and the ripened fruit are seen at the same time, the beauty of the plantation is, of course, still more remarkable. There is a kind of cotton plant which grows in the West Indies from four to six feet in height, and produces two crops every year, each plant yielding at the two gatherings about one pound of cotton. In appearance the shrub has a considerable resemblance to the currant bush. Cotton likewise grows upon trees, which are found on all the Indian mountains, but their produce is coarse in quality. The cotton plant in all its varieties requires a dry and sandy soil. A marshy soil is wholly unfit for the plant, and so little

congeniality has it for moisture, that a wet season is destructive to the crop.

The operation of gathering the ripe cotton needs to be performed with care. The women and young people who are employed in it go through the plantation several times, as the pods do not all open together, and the cotton should be plucked within a few days after it has been opened. The cotton and seeds are plucked, leaving the husk behind. Fine weather is chosen, as any degree of wet on the cotton would make it afterwards become mouldy, and would cause the oil of the seeds to be spread upon the wool. That it may be more completely dried, it is exposed to the heat of the sun on a platform of tiles or wood for several days after it is gathered; by this means, not only the wool, but also the seeds become dry, in which state they are more easily separated from the wool. To detach the cotton from the seeds which it envelopes is a work of some difficulty, and one which must be performed effectually before the cotton is packed, else it will be rendered unfit for spinning. To do this by hand would be a very slow and expensive process. All nations at any remove from barbarism, therefore, employ some kind of machinery. When the cotton is thus cleansed, it is gathered up, and by means of screws it is forced into bags. These are sewn up, pressed, and made of as small size as possible, so as to occupy little room in the ships in which they are sent to other countries. The quantity of raw cotton imported into this country yearly is over 1,000,000,000 lbs.

RISE AND HISTORY OF COTTON MANUFACTURE.

The use of cotton clothing spread very slowly, except when it was moved onward by the impetuous tide of Mohammedan conquest and colonisation. The manufacture was general in India, and had attained high excellence in the age of the first Greek historians—that is, in the fifth century before Christ, at which time it had already existed for an unknown period; yet eighteen centuries more elapsed before it was introduced into Italy or Constantinople, or even secured a footing in the neighbouring Empire of China. England was among the latest countries to receive the cotton manufacture. The exact period when it was introduced, according to one of our principal authorities on the subject, is unknown. No mention has yet been found of it earlier than the year 1641; and there are good reasons for concluding that it could not have existed long before that period. It was but little used for purposes of manufacture till the middle of the eighteenth century. The settlement of some Flemish emigrants in Lancashire led to that district becoming the principal seat of the cotton manufacture, and probably the ungenerous nature of its soil induced the people to resort to spinning and weaving to make up for the unprofitableness of their agricultural labours. Having gained a footing the manufacture was quickly developed. In 1739 it was remarked in the *Daily Advertiser* that within the last twenty years the manufacture of cotton, mixed

and plain, had attained such perfection "that we not only make enough for our own consumption, but supply our colonies and many of the nations of Europe." Within a century from that date the consumption of cotton wool in the British manufacture increased *two hundred fold*. At the present date, the number of persons employed in its several departments is not less than half-a-million ! Seeing, however, what magnitude this branch of industry had then attained, it is surprising to read that "up to the year 1760 the machines used in the cotton manufacture in England were nearly as simple as those of India, though the loom was more strongly and perfectly constructed, and cards for combing the cotton had been adopted from the woollen manufacture."

Spinning was performed from the earliest periods by the spindle and distaff. The first advance on this primitive process was the introduction of the spinning-wheel, a very simple machine, in which motion, imparted by the hand to a large light wooden wheel, was conveyed by an endless band to a spindle, which was thus caused to rotate rapidly, while with the other hand the spinner drew off from the mass of carded wool attached to it sufficient to form a single thread. The same kind of instrument was used for two successive operations. First, the formation of a thick loose cord, called a *roving*, from the carded wool ; and secondly, the extension of the *roving* itself into a fine thread or *yarn*. These processes were essentially slow, as it was impossible for the spinner to produce more than one thread at a time ; and consequently, as the manufacture of cotton goods increased, it became utterly impossible for the spinners to keep pace with the demand for yarn. The earliest successful attempt to overcome this difficulty was the *spinning-jenny* invented by James Hargreaves, a Lancashire weaver, about 1764. By this machine eight threads could be spun with the same facility as one. Directly the spinners of the locality got knowledge of this machine that was to do eight times as much as any one of them, they broke into the inventor's cottage, destroyed the jenny, and compelled him to fly for the safety of his life to Nottingham. It was, however, subsequently improved and brought to such perfection that a mere child could work no fewer than from eighty to one hundred and twenty spindles !

This machine, it appears, was applicable only to the spinning of cotton for weft, being unable to give to the yarn that degree of firmness that is required in the longitudinal threads or warp ; but this deficiency was soon supplied by the introduction of the *spinning frame*, that wonderful machine which spins a vast number of threads of the strength and hardness suitable to warps, leaving to man merely to feed the machine with cotton, and to join the threads when they happen to break. The *water-twist*, as the yarn produced by the new machinery was called, was confessedly superior to any other cotton yarn, and was found suitable for the warp of calico, or cotton-cloth ; yet such was the envy and opposition of the manufacturers generally, that they formed a combination to refuse to purchase yarn of

Arkwright, by whose inventive genius the machine had been constructed. The consequence was that he and his partners were driven to embark largely in the manufacture of cotton hosiery and calicoes, doubtless much to the ultimate advantage of the country, since they carried into all their undertakings that mechanical skill and energy which was needed to raise the cotton manufacture from its previously imperfect condition to the marvellous pitch of perfection which it shortly attained. The further steps of its progress we cannot dwell upon. Among the more important inventions which have contributed to it is the *mule-jenny*, invented by Samuel Crompton. Excellent as was the yarn produced by the spinning-jenny and the water-frame, compared with the old handspun stuff, it was coarse and full of knots; and when a demand arose for imitations of the fine India muslins, the weavers found they could produce but a very poor piece of work with such rough materials. Young Sam Crompton, who lived near to what was then the little rural town of Bolton in the Moors, grew quickly sensitive of the imperfections of the machinery he had to work with. "He was plagued to death," he used to say, "we' mendin' the broken threeads;" and could not help thinking many a time whether the jenny could not be improved so as to spin more quickly and produce a better thread. By the time he was twenty-one his thoughts had settled so far into a track, that he was able to begin making a contrivance of his own. He had a few common tools which had belonged to his father, but his own clasp-knife served nearly every purpose in his ready hands. He had his "bits of things" filed at the smithy, and to get money for the materials he fiddled at the theatre for 1s. 6d. a night. Every minute he could spare from the task-work of the day was spent in his little room in forwarding his invention. The five years of labour and anxiety bore fruit in 1779, when the "*mule-jenny*," with its spindle-carriage, was finished and set to work. As its name indicates, it was an ingenious cross between the jenny and the water-frame, combining the best features of both with several novel ones, which rendered it a very valuable machine, and may be considered the parent of the British manufacture of the muslins.

The earliest practically useful power-loom, or machine for weaving by automatic power, was that patented in 1785 by the Rev. Dr. Cartwright; but many years elapsed before the application of improved machinery in this department of the cotton manufacture became general. What the cotton manufacture has become, as a development of commercial enterprise and mechanical ingenuity, is a thing to be felt rather than described. To the Peel family much is owing for the progress it made. Robert Peel, the founder of the family, developed the plan of printing calico, and his successors perfected it in a variety of ways. While occupied as a small farmer near Blackburn he gave a great deal of attention to the subject, and made a great many experiments. One day when sketching a pattern on the back of a pewter dinner-plate, the idea occurred to him that if colour

were rubbed upon the design an impression might be printed off it upon calico. He tested the plan at once. Filling in the pattern with colour on the back of the plate, and placing a piece of calico over it, he passed it through a mangle, and was delighted with seeing the calico come out duly printed. This was his first essay in calico printing; and he soon worked out the idea, patented it, and started as a calico printer, succeeding so well, that he gave up the farm and devoted himself entirely to that business. His sons succeeded him; and the Peel family, divided into numerous firms, became one of the chief pillars of the cotton manufacture. To such perfection has calico printing now been brought, that a mile of calico can be printed in an hour, or three cotton dresses in a minute; and so extensive is the production of that article, that one firm alone turns out in a year more than 10,000 miles of it, or more than sufficient to measure the diameter of our planet.

Sir Robert Peel had a favourite saying to this effect, "That the gains of individuals were small compared with the national gains arising from trade;" and there can be no doubt that the success of the cotton trade has contributed essentially to the present affluence and prosperity of the United Kingdom. A nobler monument of human skill, enterprise, and perseverance than the invention of cotton-spinning machinery is hardly to be met with, and it is not extravagant to say that the experiments of the humble mechanics have in all their results added more to the power of England than all the colonies ever acquired by her arms.

If ever an opportunity is presented to the reader of visiting a large cotton mill, I would advise him to accept it. To watch the various processes is a most interesting sight. As you think of the obstacles which those humble inventors in the past had to contend with, the perfect machinery which you will see doing its work so quickly and so well will have a voice if you will but listen to it, and what it will say will be this, "Let not difficulties dismay, nor even temporary failures dishearten; a course of persevering industry never yet failed of its reward." We would conclude by adding, above all, interweave industry with piety. Alas! there are other agencies which are active beside the agencies for good. Satan is actively industrious to entrap souls to their everlasting perdition; industrious to make creatures born for immortality forget their high destiny, and live as though they were to perish like the brute; nothing can enable us to withstand his influence, except faith in a Redeemer's atonement and intercession, bringing to our aid the help of an Omnipotent Spirit. Be this our prayer, be this our effort, to live to God's glory, to strive in firm reliance upon the Mediator's promised grace and the Spirit's proffered succour, to use this world as not to abuse it, and to pass through things temporal so as, finally, not to lose the things that are eternal.

OUR SUNDAY-SCHOOL ALBUM.

By ENOCH GRATTON.

(Continued from page 274.)

XXIV.—A FAMILIAR GROUP.



It is by no means uncommon for a number of friends to have their likenesses taken at the same time, and to appear on the same card. Here we have the family group, there the teachers' group, now a group of singers or ministers, then a group of fast friends. I wish to call your attention to a group of well-known faces found in our Sunday-School Album. As a rule groups do not take well; the faces are dim, distorted, and some positively ugly, while others are very comical and ludicrous; the first glance at them provokes laughter. Please remember that if this Sunday-school group looks queer and muddled it is only like many other groups. In many respects the men in this group differ widely, but in one respect they are all alike. They are all retired teachers. Not one of them at present is in active service. All of them have worked, and some of them with commendable devotion.

1. The central figure in the group is that of a well-to-do, prosperous man of business; a man who has risen in the world, but who has risen as the fir-tree rises; its lower or earthward part is broad and ample, its higher or heavenward part is narrow and small. So our friend has risen; materially he is richer, larger, weightier, but spiritually he is feeble and puny. When he was a less prominent man, lived in a smaller house, and carried a lighter purse, he worked steadily in the Sunday school, but his "engagements" became so pressing and numerous, his "circle of friends" so large and respectable, that he was really obliged to give up his class. He was very sorry, he loved the school, wished it well, would still subscribe to its funds, and now and then look in to see how the school was going on, but really he must give up teaching; business, of course, must be attended to, and so must friends, and politics, and parties. And so he left the school in which he had received priceless good, and to which he professed undying attachment. He rarely looks in to see his old friends; the fact is he forgets, or is too busy, or too tired. But, mark you, he does not forget clubs, and banquets, and billiards.

2. Next to this centre figure is the likeness of Mr. Easy Soul. He was on the roll a few years, but he did not like to be at the trouble to get ready and come in time, and when he did come it was in a sleepy, jog-trot sort of fashion. The state of the school or class did not disturb him. He had little to give to his scholars, and what he did give was no better than dry, mouldy crusts; and at last, when out of shame he could not keep his class longer, he gave it up. He

felt that his poor soul was dried up like a withered twig, and he promised that some time, when his soul was charged with fresh sap, he would come back to the school. I wish that time would come soon.

3. The Offended Teacher. You see he has a cross look upon his face yet, although it is many years since he left the school. He was not without some excellent qualities. He was active, punctual, and keenly alive to whatever was going on in the school which he attended. But because he could not have all his own way, and make other people have it too; because one slighted him, another opposed him, another was put before him, he was offended—"angry, and would not go in."

"It must needs be that offences come, but woe be to that man by whom they come," and blessed be that man who, if offences come, still remains patiently and prayerfully at the post of duty.

4. The Discouraged Teacher. You can easily pick this friend out; he wears a downcast, dejected expression, and is bitterly disappointed with the result of his labours in the Sunday school. When he commenced his work he was hopeful and ardent. He thought that the "young Melancthon would soon conquer old Adam" in the hearts of the scholars; but he soon found out his mistake. Many and many a time has he left the school utterly weary and sick at heart, saying that he had laboured in vain, and spent his strength for nought, and would be compelled to give it up to somebody who would do the work more successfully. To toil all night and take nothing is indeed very dispiriting, but the noblest men have suffered in this way, and *because they were noble and brave, they toiled in spite of failure, and toiled until they won solid and lasting success.*

5. The Inconsistent Teacher. This is one of the saddest faces in the whole group, and beneath the sad face there beats a restless and aching heart. Yet that heart once thrilled with joy, that face once beamed with the radiance of love and fervour. He did run well, but something hindered him. What was it? It was tipping. It was drink, that terrible, *terrible* evil which ruins so many, both scholars and teachers. Little by little the fatal and hateful passion for drink grew upon him. Ugly rumours were circulated, sacred confidences were being shattered. Many wished he would resign or reform. By-and-by his attendance became irregular, his interest slackened, at last he withdrew. And this man, once active, useful, and esteemed, has now taken a painful position among this group of Retired Teachers all through strong drink. My advice to you, my young friends, is this: Let it alone! *Let it alone!*

6. The Busy Teacher. It is now some years since I met with this friend, but my memories of him are still vivid. He lives in a busy town where many are making haste to be rich, and not a few have become rich; and our friend also wants to be rich. He had an anxious, worried look. He was usually short of time, and wanted to put two days' work into one, and so cheat nature. He had really no time for week-night meetings, and he worked so late on Saturday

nights that on Sunday morning he was fairly done up. The world and business had drained and absorbed all his vital energy, until he was more like a sucked orange than anything else. No wonder that the school was dull, and the lesson tedious, and the class restless; there was no force in his words, no lustre in his eye, no glow in his heart. He had fair abilities, had been brought up in the school, was generally esteemed, might have been very useful; notwithstanding all this he left the school, stating that he had not time to prepare, and that he had to work so hard during the week that he needed rest on the Sunday.

The group, as you may know, contains the faces of other retired teachers, but I cannot now stay to speak of them. Of the six to whom I have referred let me say this, that every one of them might have been in the Sunday school to-day. They have all health and ability. The school needs them most urgently. From the school they have received immense blessings, and yet they are all outside. Wealth keeps one out, indolence another, pettishness another, discouragements another, strong drink another, and business another. Where lies the blame—in these things, or in the men? In the men, certainly. They need not be mastered by *any* of these things. Thousands are not. It does seem a pity that while the harvest is so vast and the labourers are so few, men not yet crippled by age and sickness should step aside from a work so holy, and grand, and imperative.

BAND OF HOPE PAPER.

WHY CHARLIE SELWYN SIGNED THE PLEDGE.

“ND so, Charlie, you ask me, do you,” said Uncle Robert, “why I am so anxious to have you sign the temperance pledge?”

“I do.”

“When I have told you fifty times that I consider it a young man's only safety?”

“Yes, Uncle Robert; but what are your reasons for believing that?”

Charlie Selwyn was the only son of a deceased friend of Uncle Robert's, and Uncle Robert, a kindly bachelor, had been his guardian and almost father since the age of ten. Now he was nearing manhood, and on this the eve before his twenty-first birthday Uncle Robert again approached him on the subject of temperance, anxious that he should start aright in manhood's path.

“If you sign the pledge, Charlie, you are surely safe.”

“Yes, Uncle Robert, I grant that; but where is my manhood if I cannot depend upon it to carry me through the world aright? Where are my principles if I cannot restrain myself when I am in danger?”

"But, Charlie, my boy, the descent is so gradual that you may not realise your danger until the habit has a strong hold upon you, until, may be, your prospects for life are blighted."

"I am never wilfully blind, uncle."

Slowly Uncle Robert crossed the room, and, turning the key in his private secretary, also unlocked an inner drawer, from which he took out a small box, and drawing a chair in front of the table, sat down by Charlie's side. With trembling fingers he loosed the cord that bound the box, saying: "These are sorrowful mementos;" then taking from it a daguerreotype, said, as he handed it to Charlie Selwyn, "It is old and faded, but tell me what characteristics you see in the face."

"Intellect first," was the reply; after a careful examination, "Sensitiveness and pride."

"Yes. He was a dear college mate of mine, a young man of uncommon mental endowments. He acquired the habit, when lessons pressed too heavily, of taking a glass of champagne, 'just to liven him up,' as he said. He wrote several brilliant articles for one of our leading weekly papers, and found a glass of wine just exhilarating enough to enable him to express his ideas in glowing language. But the habit grew upon him, and before the end of our college life his customary preparation for evening study was a glass of wine, supplemented not unfrequently by another in the course of the evening. He left college to take a leading place on the paper for which he had regularly contributed. Anxious to discharge his duties to the best of his ability, he depended more and more upon stimulants, and before he was aware of the fact, the habit had become so fixed that he could not break loose from it. He lost his situation, for he could no longer be depended upon. Friends greeted him coldly and reproachfully, and in a fit of despair, following a deep indulgence, suicide ended his life. Look at that forehead, Charlie; well might one envy the man's intellect."

Replacing the picture in the box, Uncle Robert brought forth a soiled slip of paper, and unfolding it, said: "This was brought to me one evening some fifteen years ago by a shivering, tattered lad. It reads thus—

"For the sake of boyhood days, Robert Weldon, will you follow this child to the miserable hovel where lies a poor, besotted wretch?"

"EDWARD KNEELAN."

"I followed the lad, and during the long hours of that ever-to-be-remembered night I watched by the sick man's bed, and he related to me his painful history. In the wan, haggard face of the death-stricken man before me I never should have recognised the playmate and friend of my childhood and youth. He, Charlie, was like you—thought his principle would check him if he should ever be in any danger of excess; he thought signing the pledge was confessing his inability to rule himself; and he lacked the moral courage to render himself noticeable by refusing the social glass. He married quite

early in life, and the first winter was but a succession of gay festivities. At the wedding-feast wine flowed freely, and before the winter was ended, once, twice, and even thrice was he brought to his home in a helpless condition; and yet he would not yield his manhood by signing the pledge, though his fair young wife and other friends besought him to. In course of time a daughter was given to him, and for a time the helpless charge led him in the path of rectitude. But he did not like to look mean; so friends were treated, and alas! the appetite got the better of him. It is a long and sad tale, Charlie. Neglect, lack of food, and abuse caused the death of the child, and also that of the wife, but not until after she had brought into the world two sons, one of whom was the wretched messenger that summoned me. At last death released Edward Kneelan, and I opened a correspondence with the friends who had cast him off, on behalf of the two orphan boys, whose only heritage from their father was a diseased appetite and the shame that attaches to a drunkard's child. The years have passed, but already the eldest is hastening with rapid steps towards his father's doom; while the youngest, knowing total abstinence alone can save him, is making strenuous exertions to uproot the seeds implanted at birth.

"This, Charlie," continued Uncle Robert, unfolding a slip of paper, from which he reverentially took a long lock of hair, "is gray enough to have been cut from the head of a woman of seventy; but she was only thirty. Ellen, my only sister's hair." And tremulous fingers tenderly stroked the white lock. "She married at twenty a young man of fair prospects, a rising lawyer, of no bad habits. To be sure he occasionally indulged in a glass of wine, but so did nearly everyone else. Ellen's husband had no inherited tendencies that way, and there were no special causes that led to his ruin. Gradually he fell—so gradually that we noticed the dejected, worn look on Ellen's face months before we knew the cause. Friends begged her to leave him, but she resolutely refused, saying that the marriage-vow was 'for better or for worse.' The worst had come, but, God helping her, she should keep the wife's place by his side while life lasted. In ten years' time he died of delirium tremens, and in one short week the faithful wife who had borne so much yielded her life. One more, Charlie, and I am done."

This time Uncle Robert handed Charlie an exquisite painting on ivory, the face of a young girl, rarely beautiful in feature, but with an expression of the saddest. A curl of ruddy-brown hair lay beside it.

"This is the portrait of Alice Fane, at whose feet I laid my boyish heart. She was some five years my junior. I finished my college career when but twenty-one, and then pleaded for an engagement; but to that her father—her mother was not living—refused to consent for at least two years. Seeing the propriety of his objections, and with all the hopefulness natural to youth, expecting that period soon to draw to a close, I spent the time travelling. When,

at the expiration of the two years, I returned to my home, it was to find a sad change. It was now Alice who refused my suit. Mr. Fane had always been a moderate drinker, but some embarrassments in business, superinduced by an unfortunate speculation, occurred almost immediately after I left home, and he then began to take a little more to drown sorrow—as this reverse was followed by another—until the daily potations had become so deep that he was recognised as a common drunkard; that is a hard word, Charlie. Alice's little sister, a child of only eight years, was condemned to suffer, as the price of one of his drunken orgies, from a spinal complaint, the result of heavy blows he had inflicted.

"To these two Alice devoted her life, refusing my love. At my earnest request she had this picture painted. For five years longer the father lived, until he had drunk up every cent of his large property, and had not a small sum been left the children at their mother's death, they would have been penniless. Then, again, I sought Alice's side, urging her to become my wife; but, with love looking from her eyes and trembling in her voice, she refused, saying she could not properly perform the double duties of nurse and wife. Both Bessie and myself would be neglected. Though her heart was linked to mine, her life could not be. Bessie is still a patient sufferer, and Alice an unwearied nurse. If unseen coronets ever gleam on woman's brow, Alice's must be resplendent."

Uncle Robert's husky voice failed, and he bowed his head on his hands, while great tear-drops trickled through his interlaced fingers.

Charlie Selwyn's voice broke the silence, saying, "Uncle Robert, give me the pledge. I will sign, and with God's help, keep it."

* CORRECTION.—In the Band of Hope Paper last month the beginning of the fifth line should read—"We are met to explain."

THE EDITOR'S TABLE.

A SUNDAY-SCHOOL TEACHER wishes to be informed as to the exact time when Jesus Christ was born, as he has seen it stated in print that we commemorate it at a wrong date. Our unknown friend says many besides himself wish to know the correct date. We are afraid their curiosity cannot be gratified. The evidence we possess regarding the date of Christ's birth is only traditional, and is likewise conflicting and confused. It would take up too much of our space, and not be interesting to most of our readers, to give this evidence in detail. Suffice it to say that, while from the end of the fourth century at least the 25th of December has been uniformly observed as the anniversary of the Nativity by all the nations of Christendom, the generally received view now is, that it does not correspond with the actual date of the nativity of our Saviour. One objection in particular has been made, that the incident recorded in Scripture of

shepherds keeping watch by night on the plains of Bethlehem could not have taken place in the month of December, a period generally of great inclemency in the region of Judæa.

To fix the exact date of Christ's birth we believe to be impracticable, but, we may also add, it is a matter of no importance whatever.

"J. L." wishes us to explain the meaning of the word *tradition* in Matthew xv., 2. Was it a law or only a custom which required the Jews to wash their hands before eating? There was no written precept to the effect that bread should be eaten, or, in other words, a meal be taken only with washed hands. No doubt the usage began for purposes of cleanliness when the food eaten had to be conveyed to the mouth by the fingers, and not, as with us, by fork or spoon. In course of time a factitious sanctity was given to the practice by the teaching or sanction of the elders. Their opinions were handed down from generation to generation by oral report, or, as we might say, by *word of mouth*; for that is the meaning of *tradition*—that which is transmitted to posterity by word of mouth, and not in writing. God's Word is a written Word; it is *Scripture*. By a natural growth of exaggeration, *tradition* was allowed among the Jews to have higher authority than *Scripture*. We are told that it was actually a saying with some of them that "the words of the elders are weightier than the words of the prophets."

Christ, it would seem, taught His disciples that there was no great religious merit in washing the hands before eating, and in this He opposed the traditions of the elders. Without doubt He loved cleanliness even more than the Scribes and Pharisees, but they had magnified it into a spiritual charm, and so made it a spiritual snare. Hence the Rabbis came to teach: "Whosoever hath his abode in the land of Israel, and eateth his common food with washed hands, and recites his phylacteries morning and evening, he may rest assured that he shall obtain eternal life."

We have received the following, to which we call the attention of teachers and the elder scholars in our Sunday schools:—

4, Attercliffe, Sheffield, September 10th, 1877.

DEAR SIR,—

As the season of the year is approaching when the nights are long and cricketing and other outdoor games must be relinquished, our young men will naturally turn to something else to pass away their leisure time. How much better it would be if instead of loitering at the street corners or sitting in doors engaged in frivolous conversation they would seek self-improvement. Towards this end I think that it is very desirable that in connection with all our Sunday schools there should be formed Mutual Improvement Classes, to be held on one or more of the week nights. These classes should be under the presidency of the minister if possible. We have had an

excellent one in connection with our school here at Attercliffe for the last three years, and are about making arrangements for the ensuing session. The class, I can assure you, has been productive of much good. Such classes cannot fail to be, if conducted properly and are regularly attended. The manner of conducting ours, I may say for the information of those who are desirous of commencing a similar one, has been somewhat as follows:—The minister is chosen as president, a programme is drawn up and printed, consisting of "Essays" upon various subjects, interspersed with evenings for "Impromptu Speeches" and "Extemporaneous Composition," &c. Each essayist is allowed not more than twenty minutes for the reading of his paper. While he is so doing, the members of the class, each provided with pencil and paper, take notes upon it, and after the reading they are called upon by the chairman to criticise or comment upon the paper, not forgetting to mention any grammatical errors or defects in reading or composition. After which the essayist is allowed to answer any objection that has been raised. The chairman then comments upon the paper, and concludes the meeting with prayer. Thus much thought is aroused, much latent power developed, and great good is received. The classes of course may be conducted in various ways; the above is one. Cannot something be done, say an appeal be made through the JUVENILE INSTRUCTOR, for the formation of such classes? Pardon me if I am bold in thus writing to you, but I think something might be done in this direction.—Yours respectfully,

Rev. J. Hudston.

A MEMBER OF THE CLASS.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

NOVEMBER.

MORNING SUBJECTS.

SUBJECT.

FOR READING.

FOURTH QUARTER.

4	The People's Sin	Exod. xxii. 1—20...	1 Cor. x. 14.
11	Moses' Intercession	Exod. xxxiii. 1-3, 1	2—23] Dan. ix. 9.
18	The People's Offerings...	Exod. xxxv. 20 to	xxxvi. 7] 2 Cor. ix. 7.
25	The Tabernacle set up ...	Exod. xl. 17—38..	John iv. 24.

AFTERNOON SUBJECTS.

SUBJECT.

FOR READING.

FOURTH QUARTER.

4	Paul before Felix	Acts xxiv. 10—27	ver. 25.
11	Paul before Agrippa	Acts xxv. 23 to xxvi.	18] Matt. x. 19.
18	Almost persuaded	Acts xxvi. 19—32	ver. 28.
25	Paul in the Storm	Acts] xxvii. 1—26	Psa. lvi. 3.

Golden Texts for Repetition.

Golden Texts for Repetition.

DECEMBER.

MORNING SUBJECTS.			Golden Texts for Repetition.
SUBJECT.		FOR READING.	
FOURTH QUARTER.			
2	Spies sent out.....	Num. xiii. 1-8, 17-3	3] 1 Cor. x. 11.
9	Israel's Unbelief.....	Num. xiv. 1-10, 26-3	1] Heb. iv. 11.
16	Moses' Last Blessing.....	Deut. xxxiii.	ver. 27.
23	The End of a Noble Life	Deut. xxxiv.	Rom. xiv. 8.
30	God's Mercies to Israel ...	Psa. lxxviii. 1-8, 25-	39] Ps. ciii. 2.
AFTERNOON SUBJECTS.			Golden Texts for Repetition.
SUBJECT.		FOR READING.	
FOURTH QUARTER.			
2	The Deliverance.....	Acts xxvii. 27—44	Ps. cvii. 30.
9	Paul in Melita.....	Acts xxviii. 1—15.	Rom. i. 14.
16	Paul at Rome	Acts xxviii. 16-31.	Rom. i. 14.
23	Paul's Last Words.....	2 Tim. iv. 1—18...	ver. 7.
30	Review of the Quarter's Lessons		Phil. iii. 7.

PUZZLES FOR CHILDREN.

BY UNCLE GEORGE.

1. Who said, "I am innocent of the blood of this just person"?
2. Of whom is it said she was beautiful and well-favoured?
3. What king of Judah was buried in Jerusalem, but not in the sepulchre of the kings?
4. The second letter of the name of the country of which Rezin was king.
5. What was thrown out of a certain ship in order to lighten it?
6. Whose spear weighed three hundred shekels of brass?
7. Whom did Paul call his own son in the faith?
8. What rich and honoured man was very unhappy because a Jew would not bow down to him?
9. What king possessed a bedstead of iron?
10. Who built an altar after the pattern sent him by his king?
11. Whom did the Jews accuse Paul of bringing into their temple?
12. What name did the followers of Christ receive in Antioch?
13. Whose name backward and forward spells the same?
14. The birthplace of Apollos.
15. With what did Elisha heal the unwholesome waters?
16. What judge of Israel had thirty sons and thirty daughters?
17. Whose vineyard did Ahab covet?
18. What great champion of the Philistines was slain by David?

The initials of the answers form a command which we all ought to obey.

A CAT WAITING FOR ITS SHIP.



HE is a Beston cat, but her home is on the high seas. Puss is a brave sailor, and has taken many a voyage from Boston to the Azores and back on the good ship *Kate Williams*, commanded by Captain Beebe. Whenever the ship reaches Boston, puss always lands and has a social time with old friends on shore—cat friends among others, probably. One day she was so entertained with her visit that she stopped a little longer than usual; and when she returned to the wharf she found the ship had sailed without her. She gazed with longing eyes far out over the water, and sniffed her whiskers as if scenting out the track of the receding and now invisible ship. But she knew it was of no use; she knew the ways of the ship too well. Every day for three months she appeared on the wharf with clock-like regularity, and sniffed and gazed, and gazed and sniffed. There were plenty of ships coming and going, but they were nothing to her. At last the right one came. It had hardly touched the wharf before a cat, grown thin and gaunt with anxious months of waiting and watching, sprang on board and made a dash for the captain's room, where, finding him, she sprang on to him, put her nose in his neck, and meow-wow-wowed, meow-wow-wowed, and talked and talked, and told such a pitiful cat tale as never greeted a captain's ear before. That ship has never a chance to leave puss on shore now. She is sailing the seas to-day.

CLAY CROSS.—On Sunday afternoon, March 25th, 1877, we held a very interesting, and considering the long strike and the depressed state of trade here, a very successful juvenile missionary meeting, when the following pieces were most efficiently rendered, interspersed by the singing of suitable hymns, viz.—Dialogue on “India and the Hindoos,” by Charles Bevington, Charles Bradder, George H. Rowarth, John Griffin, John Grainger, and Charles Clarke. Dialogue on “David Livingstone,” by George Hextol and David Haslam. Dialogue on “China and the Chinese,” by Agnes Whetton, Eliza Griffin, Charles Bevington, and George Hextol. Dialogue on “Dennis and the Priest,” by Matthew Payne and John Knighton. Dialogue on “African Missions,” by Lilly Banks, Emily Shore, Hosea Marriott, and George Hextol. Dialogue on “Christian Missions,” by Polly Slack, Polly Bradder, and Eliza Griffin. The following is the list of collectors and the sums collected by them—viz., Young Men's Select Class, 5s.; Young Women's Select Class, 4s. 1½d.; John Barton, 15s. 2d.; Sarah Ann Vardy, 14s. 5d.; Thomas Shore, 2s. 10d.; Ellen Smith, 2s.; Emma Bonsall, 1s. 10d.; Lilly Banks, 1s. 8d.; James Wood, 1s. 5d.; Arthur Robinson, 1s. 3d.; Sarah Ann Rodgers, 1s.; Matthew Marriott, 1s.; William Wood, 1s.; Minnie Griffin's Box, 4s. 6d.; small sums, 9s. 5½d.; Sunday's collection, £2; total, £5 6s. 8d. The children were trained for the occasion by Mr. Bevington and Mr. W. Pitchford. The chair was taken

and the opening address delivered by the minister. The entire proceedings of the meeting appeared to afford the greatest possible satisfaction to a large, respectable, and an attentive audience.—A. C. BEVINGTON.

Poetry.

THE CHILDREN'S PICNIC.

'Twas the merriest, funniest picnic
That ever you did see ;
They held it down in the orchard,
Under the apple tree.

The air was heavy with fragrance
And full of the hum of bees,
And showers of the pink and white blossoms
Were wafted down by the breeze.

They scattered over the dishes
In a merry little whirl,
Till the table seemed decked for fairies
With a service of pink and pearl.

There were Nellie and Tom at the table,
And Pussy and Rover for guests ;
Both with their well-washed faces,
And their coats were their sleekest and best.

Nell gravely waited on pussy,
And Tom gave Rover his share,
And the children loudly praised them,
For a well-behaved pair.

And they purred and wagged politely,
But 'twas quickly forgotten all,
When a field mouse scampered past them,
And a squirrel jumped on the wall.

Right over the table sprang Pussy,
And Rover gave squirrel the chase ;
Leaving the children in wonder
At their picnic turned into a race.

The chairs were o'erturned, and the table
Stood gracefully tipped on one side ;
While the dishes and all their contents
Were rolling far and wide.

Tom laughed till the tears were falling
Over his cheeks like rain ;
But Nellie in wrath said she'd never,
Never invite them again.



FEEDING THE BIRDS. (*See page 311.*)

THE EDITOR TO HIS READERS.



MY DEAR FRIENDS,—With the issue of this number we complete another volume of the JUVENILE INSTRUCTOR. During the year we have done our best from month to month to interest and instruct you, and we trust not without some success. "Ben Barlow's Budget" must have given some amusement to our boy readers. The story may also teach them many a useful lesson besides. If they drink into its spirit they will be truthful, honest, brave and generous; they will also have a proper reverence for God, and desire both in their studies and their play to please Him. From the "Footprints of God in Nature" they will see what a claim God has upon the reverence and love of His intelligent creatures. God has made all things, and He has made the world in such a way as to show His goodness as well as His skill and greatness; very properly, therefore, we may say, in the words of the Psalm, "O that men would praise the Lord for His goodness, and His wonderful works to the children of men." The "Papers for Thoughtful Boys" should strengthen our feelings of thankfulness to God, and our delight in Him. They teach us that while "the earth is full of His riches," He has given man intelligence and skill to obtain those riches and apply them to his own comfort and well-being. "Tom Foster, the Orphan," cannot have been read without emotion. It is a sad, but a true story, which teaches what an evil and bitter thing it is to sin against God. "The way of transgressors is hard;" it is the way of ruin and death. All will find it so who continue in this way. But they need not continue; they may turn out of it, for God has a fatherly care for the poor, and destitute, and sinful, and if they look to Him, He will help them and be their Saviour. "Our Sunday-School Album" contains a good number of likenesses; our readers have probably looked at them as they have been exhibited, to see if they could find one which they might call their own. Well, some of the likenesses we hope are not true representations of any of our readers, but all Sunday-school teachers or scholars may advantageously now and then open the album and look at the cartes. Then the "Band of Hope Papers" we trust have been attentively read, and have led many a reader to abstain from ever putting an enemy into his mouth to steal away his brains.

But we have said enough, perhaps, of the contents of the table spread for your repast during the year now closing; only we may just

make remark on the absence of one or two articles mentioned in the prospectus of twelve months ago. Grandpapa has not given as he promised the "Story of my Child-life," but he assures us he has not forgotten his promise, and says we may put it on our bill of fare for 1878 with a different result. The Editor, too, hopes to fill up "The Children's Book-shelf" with works worth their reading and possessing. It has occurred to us that we have not catered sufficiently for our girl readers. Next year we shall have a nice tale for them by the author of "Manchester House," and another from the pen of the charming writer of "Ned's Search." Our full prospectus for next year may be found on the fourth page of the wrapper. Will our friends please give it a careful reading, and then we have no doubt they will give in their names at once to their teacher or ministers as SUBSCRIBERS for 1878. We also ask them to be so kind as to show it to their friends and ask them to become purchasers. If teacher or minister is not accessible, the magazine can be obtained through any bookseller.

Wishing you all a cheerful Christmas and a happy New Year, we are yours very sincerely.

THE EDITOR.

BIRDS IN WINTER.

"**H**OW do the birds manage at night and in tempestuous weather?" is a question often asked me. Time was when it was believed that many of them hibernated—especially the swallows—burying themselves in the mud like frogs, or curling up in holes in rocks like the bats; and the common phenomenon of the appearance of a few summer birds during "warm spells" in winter was assumed to prove that they had been torpid, but had been waked up by the genial warmth, as bats often are. It was not three months ago that I saw in an English newspaper a letter from a man who claimed to have found a hedge-sparrow (I think) torpid somewhere in the mud. But the search for proofs of this theory discovered that the birds supposed to hibernate migrated, while of the birds which remained in this latitude through the cold months we saw more in warm, fine weather, for the natural reason that they then forsook the sheltered hollows and cozy recesses of the woods where they had retreated during stormy days, and came out into the sunlight. The dense cedars and close branches of small spruces and other evergreens afford them close shelter, and thickets of brambles are made use of when these are not to be found; hollow trees are natural houses in which large numbers huddle, and the cave-like holes under the roots of trees growing on steep banks are favourite hospices. The

grouse plunges through the snow down to the ground, where it scrapes bare a "form," or crawls under the hemlock and spruce boughs which droop to the earth with the weight of snow, and allows the white mantle to drift over it, subsisting the while on the spruce-buds; when the storm ceases it can easily dig its way out, but sometimes a rain and hard frost follow which make such a crust on the snow that it cannot break its way up through, and so starves to death. The more domestic sparrows, robins, and flickers burrow into the hay-mow, find a warm roost in the barn near the cattle, or, attracted by the warmth of the furnace, creep under the eaves or into a chink next the chimney of the greenhouse or country dwelling. The meadow-lark and quail seek out sunny nooks in the fields and crouch down out of the blast; while the woodcock hides among the moss and ferns of the damp woods where only the severest cold chains the springs. Along the coast many birds go to the seashore for a milder climate.

It nevertheless happens, in spite of their high degree of warmth and vitality—probably not exceeded by any other animal—in spite of the fact that they can draw themselves up into a perfect ball of feathers which are the best of clothing, and that they can shelter themselves from the driving storm—that birds often perish from cold in large numbers. Ordinarily, birds seem able to foretell a change of weather, and prepare. The reports of the United States Weather Bureau certainly show that, during the fall and winter, the ducks, geese, cranes, crows, and other notable species—and apparently generally—abandon their former haunts upon the approach of a cold wave or severe winter storm for more southern localities, often passing beyond the reach of the severity of such storms, taking their departure often only a few hours before these unfavourable changes. The resident species, not caring, or able, to run away to warmer latitudes, ought to know enough to hide away from the fury of the gale; and they do. But sometimes there come sudden, unpresaged changes—cold, icy gales, which charge down upon us after thawing-days, converting the air, which was almost persuading the grass to revive, into an atmosphere which outs the skin like the impinging of innumerable particles of frost, and shrivels every object with cold or buries it under dry and drifting snow. Then it is that the small birds, caught unprepared, suffer. At first such as are overcome seem unusually active, running about apparently in search of food, but taking little notice of one's approach. "Should it attempt to fly," writes a recent observer, "it immediately falls on its back as if shot. The legs and toes are stretched out to their farthest extent, and are quite rigid; the eyes protrude, are insensible to the touch, and the whole body quivers slightly. It remains in this state from one to two minutes, when it recovers suddenly, and seems as active as before. If taken in the hand, it will immediately go into convulsions, even if it has been in a warm room for several hours, and has been supplied plentifully with food. Death usually puts an end to its suffering in a day or two."—*Appletons' Journal* (American).

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of "A Year at School," &c., &c.*

Letter No. 65.

From BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,

November 28th, 187—.

MY DEAR CHARLIE,—

I am afraid you have already begun to think I have forgotten you. When you had time to write frequently I used to write often, and I feel really ashamed that I should even appear to neglect you now that you have less leisure to remind me of my duty. I can honestly say, however, that though I have not written, I have frequently thought of you, and scarcely a day passes without Ted and I talking about you.

Well, now that I have begun to write, I have hardly anything to tell you. We are, of course, working hard for the Christmas examination. I don't know whether you will easily believe it or not, but I take a pleasure in my lessons now. If I did not I shouldn't get on as well as I do in the playground. For, however well a lad can play at cricket and such like, he isn't thought much of here if he shirks his lessons.

What do you think? When the dark nights began Mr. Macpherson started a weekly entertainment. It is held in the schoolroom on Friday evenings. The Doctor took the chair the first night, Mr. Macpherson next, and since then the chairman has been elected by vote from among the boys. I proposed Ted Instone for the office at next Friday's meeting, and it was carried unanimously. During the week Mr. Macpherson gets the names of about twenty who are prepared to read, sing, or recite, and we go through the programme, and applaud and hiss just like a public audience. It is jolly, I can tell you. Mr. Henley—Stilts, you know—has read twice; but he always reads out of "Paradise Lost," and I can never make out what it means. Mr. Macpherson generally gives two readings at each meeting, the first a grand piece; he read Scott's "Death of Marmion" once, and another time Macaulay's "Horatius," and he finishes up with a funny bit, such as Hood's "Ben Battle," or a selection from "Pickwick." I wish you were here to enjoy these meetings.

Hoping you are going on all right at the office, and with kind regards to your father and mother, I remain, yours very truly,
BEN BARLOW.

Letter No. 66.

From TOM BLUNT to BEN BARLOW.

Old Mill, Woodbourne,
November 30th, 187—.

MY DEAR BEN,—

Thanks for your letter. I quite agree with you. Your schoolmaster was right to be strict on bonfire day. If he hadn't been you might have got hurt just as badly as Edgar Foster. He has come to school again. His face isn't quite well yet, though.

Mr. Jones started a drum and fife band last week. I play one of the kettledrums. We meet twice a week for practice. A musician comes from Tinbury to teach us the drum. Of course the master can teach the fife himself. There are over twenty of us in the band. If we get on well, Mr. Jones says we shall give a public performance at Christmas. I do like it. I can beat the drum pretty well already. But I have hardly got into rolling the sticks properly yet.

With kind regards to yourself and your friend Instone, I am,
yours very truly, TOM BLUNT.

Letter No. 67.

From BOB to BEN BARLOW.

Woodeburn,
December 14th, 187—.

DEER MASTER BEN,—

I rite too inform yoo thet sevrall of yoor yung rabbits hev dide latly. Fur a lung time I cudn't find out wot kild em. But at last I saw it wos rattis. Thay had nibbld a hole throo the back of the huck. So I hev made a bran noo penn, and fixt it in the wormest cornr of the hay loft. Thay'll do bettr ther this cold wether. I cant the ratt in a trapp.

I hop yoo think I get betur in ritin. I hev bene to the nite skool fur the last too munths. Mistr Jones ses if I cud spel as well as I can rite, I shud get along furst clas. But wurdz seme to be all speld contrairyways.

Yoo will soon be cumin home fur yoor hollydays. We shal be very glad too sea yoo. I remane, yoor obedent survant, BOB.

Letter No. 68.

From CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,
December 12th, 187—.

MY DEAR BEN,—

Your letter gave me a great deal of pleasure. I always felt certain you were true to me at heart, though I couldn't help occasionally thinking you had forgotten me. I look every morning before I start to business among the letters addressed to our Post

Office to see if I can find among the big blue official envelopes a little white one, addressed in your plain, bold hand.

I can readily believe you have altered since you left here so as to be able to take a pleasure in your lessons, for I am very much changed myself. It sometimes seems as if I had been away from school years instead of months.

You say you hope I am going on all right at the office. Well, I am getting on pretty well, though everything isn't pleasant, of course. I have got one move already. It happened this way. The boy who was next above me had the keeping of the postage stamps. Well, the older clerks thought there were more being used than there ought, so they took count of the letters sent to the post every night for a week, and in that way found there had been more than a shilling's worth too many stamps used. They accused him of taking them, searched him, and found some in his pockets, which he confessed belonged to the firm. They at once dismissed him, and handed his keys over to me, and, of course, there is another lad set on in my place. I was downright sorry for the boy who left. His mother is a poor widow, and, of course, he won't easily get another situation. He was about my age, but he had begun to smoke. I expect that was what took the postage stamps.

I got into a terrible row with one of our clerks last week. You of course remember Punch—the dog Old Peter gave me. Well, he doesn't approve of my being away from him for twelve hours a day, and he has tried many a time to go with me to the office. Of course I drive him back. But last Wednesday he slipped off before me, and I found him waiting for me quite halfway to Tinbury. The trick was so cleverly done that I hadn't the heart to turn him back, so on we went together to the office. He was no trouble there at all. He is easier to manage than a child. I just told him to lie down in one corner, and there he lay as quietly and as comfortably as if he had been born there.

I was called out of the office just as the dinner bell rang, and on going back about five minutes later to get my dinner, I was struck to see one of the clerks aiming with a ruler at Punch, who lay growling in his corner. I couldn't stand it, so I snatched the ruler out of his hand, threw it on the desk, and stood between him and the dog. This made him lose his temper, so, instead of telling me why he was hitting my dog, he began to box my ears well for my impudence. Of course I knew better than hit him again, and after all I didn't care a great deal. It didn't hurt me nearly so much as his thrashing Punch would have done.

After a bit, another clerk came in, and then he who was boxing my ears explained that he had left his dinner—a mutton-chop—on the table, and after going into the next office for some water he found it clean gone. Of course he said my dog had eaten it. I felt sure he hadn't; for Punch is as well behaved as any dog in the kingdom, and, besides, he had had a good breakfast that morning.

And I was right too. It seems somebody had hidden the clerk's mutton-chop in one of the cupboards for a bit of fun. When he found he had wrongly accused my dog he was sorry, and tried to make it up by throwing Punch the bone, but that indignant quadruped would neither look at him nor his bone. I, however, didn't keep up my ill feeling so long, and, would you believe it, the clerk seems to like me all the better for having interfered in the dog's behalf. I heard him telling another the next day "how pluckily the young rascal snatched the ruler and took the dog's part."

But I must wind up. It is Saturday evening, and I have to make the post-bag up for father. Please remember me to Instone. Your affec. friend,

CHARLIE THORNTON.

Letter No. 69.

From BEN BARLOW to TOM BLUNT.

Waterside House, Worcester,
Dec. 15th, 187—.

DEAR TOM,—

I am glad to hear you are turned drummer. I shall be glad to hear you play, I am sure. Ted says he should think the least you can do is to bring the band to meet my train at Hammerthorpe, and play "See the conquering hero comes" all the way to Woodbourne.

By the way, what do you think about the weather for the holidays? Of course it is too early to judge yet, but I'm afraid we shan't get much skating. I hope your father won't run much water off for the next few weeks. Ask him to please let the mill-pond be as full as possible for the holidays.

With kind regards to yourself, and [all inquiring friends, I am,
yours truly,

BEN BARLOW.

Letter No. 70.

From BEN BARLOW to MRS. BARLOW.

Waterside House, Worcester,
December 18th, 187—.

MY DEAR MOTHER,—

Are you and father coming to our breaking-up on the 23rd? The Doctor told us he was sending out the invitations to-day. I hope you will come, for I have learnt a recitation to give on the occasion. And besides us boys, Mr. Macpherson will give a reading, and sing. He can do both splendidly.

I haven't time for much more. Our examination begins on Monday morning, and I want to be quite ready for it.

With love to yourself, to father, and to Clara, and Helen, I remain, your dutiful son,

BEN.

Letter No. 71.

From MRS. BARLOW to BEN BARLOW.

The Laurels, Woodbourne,
December 19th, 187—.

MY DEAR SON,—

I fully intend availing myself of Dr. Tasker's invitation to your breaking-up entertainment on Thursday next, and if your father can spare the time he will accompany me.

I hope you will do yourself credit in the recitation, and I do not doubt but that you will.

Your sisters are quite elated at the thought of their big brother coming home so soon for the holidays. They join me and your father in sending love to you. Your own

MOTHER.

Letter No. 72.

From BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
Dec. 20th, 187—.

MY DEAR CHARLIE,—

Thanks for your long letter. I am glad to hear of your advance in the office. I wonder you didn't make that clerk remember hitting you or your dog, even though he was elder than you.

We shall hold our public breaking-up on Thursday. Mother is coming, and I shall return with her. So I shall soon see your face again, old boy, though I suppose you will not have much leisure to spend with me. Yours in haste,

BEN BARLOW.

Letter No. 73.

From TED INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park,
London, Dec. 24, 187—.

MY DEAR BEN,—

I got home late last night. Found all well except Ernie, and he is better than usual—looks quite lively. His rabbits are doing first-rate.

Excuse more now. I am going out to a party almost directly, so must say good-bye. Yours affectionately,

TED INSTONE.

P.S. The compliments of the season to you, old chum.

Letter No. 74.

From BEN BARLOW to TED INSTONE.

The Laurels, Woodbourne,
Dec. 24th, 187—.

MY DEAR TED,—

Mother and I got home safely about seven o'clock. All at home are well, and of course the house is decorated with holly and ivy, and

everything looks bright and warm and jolly, as it ought at Christmas. I have not seen many of my old schoolfellows yet, but those I have seen have been particular to inquire about you.

Wishing you and all your friends "A merry Xmas and a happy New Year," I remain, yours very truly,
BEN BARLOW.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXII. — THE SHEEP.



HE benefits we receive from this animal are both numerous and important; and of all the creatures with which man has to do there is none more innocent and gentle, and none that so combine efficiency and variety of service with inexpensiveness of maintenance. The sheep is found in most of the habitable parts of the world, with varieties of structure and character that most exactly adapt it to the climate in which it lives, and the food by which it is supported. Whether these differences have existed from the beginning, and were ordained by the Creator to fit the animal for its surroundings, or whether, as is most commonly thought, these differences have been developed by climatic and other similar influences, makes no difference to the argument being pursued in these papers. If pre-ordained by God, then we see a gracious design in its simplest form, whereby the Almighty, by slightly varying types of the same animal, bestows the same advantage on men in all parts of the world. If, on the other hand, these varieties are produced by the exigencies of food, climate, and mode of life, and every species has descended from one original stock, then the Divine power and wisdom are even more conspicuously seen in the creation of an animal that has a latent power of adaptation practically inexhaustible. The original animals of which it is supposed all the rest are mere varieties, are still found in large flocks in the high mountain regions of Persia.

It would be impossible here to give any idea of the innumerable species that exist throughout the world. Perhaps the most extraordinary of them is the long fat-tailed sheep that flourishes in parts of both Asia and Africa. The tails of these animals are so heavy and so long that as they move from place to place they have to drag them behind them on the ground. If the sheep of "Little Bo-Peep" that were unfortunately lost, were of this kind, it is by no means superfluous to relate that on their return they brought their tails behind them; for at the Cape, and in other parts, the fat of these appendages is greatly relished as an article of diet, and rascals who are not equal to stealing a whole sheep sometimes lop off a few tails.

Sheep afford us in England an excellent supply of good food and warm clothing, and, besides, find ample employment for tens of thousands of people in the factories of Yorkshire and the West of England. Every handful of wool that grows on the back of the sheep contributes to the support of quite an army of staplers, dyers, pickers, scourers, carders, spinners, warpers, weavers, clothiers, &c. The raw material is tumbled and tossed about from one to another until a score different sets of workmen have wrung a living out of it; and then comes the turn of the merchant. He sends it to various parts of the world, and as he requires ships for this purpose, we come upon an entirely new set of artisans—engineers, shipbuilders, and sailors—who in part are set to work by the quiet-looking creatures that graze on our commons. England has always stood unrivalled for the manufacture and exportation of cloth. Even as far back as the days of Edward III. cloth to the value of £150,000 was exported annually.

But when we have deprived the sheep of his coat he immediately begins to grow another. It is no cruelty to take from him his wool if only it be done at the right time. Providence plainly intends it as a special gift to man, for if it is not cut off it will proceed to drop off of its own accord. It is like hair on other animals, intended to keep the sheep warm during the winter; but just as in the spring other animals cast off their hairy coats, and men themselves leave off their clothing, so the sheep is then better without his wool than with it. Wool differs from hair in the fineness and uniformity of its growth. Every filament of wool seems to keep pace with every other in the various parts of the body; the whole crop springing up, and advancing uniformly together. Unless previously shorn, the whole falls off together, leaving the animal covered with a short coating of young wool, which in its turn will undergo the same changes.

When we are hungry and kill the sheep, we get the tender and succulent mutton; but every part of the body is brought into some use. The skin goes to the parchment-makers, and supplies the durable material on which important legal documents are engrossed. What the parchment-maker cannot use the glue-maker picks up, and supplies that useful article without which cabinet-makers and joiners would be at a loss to unite pieces of wood that are too small to be nailed together. One part of the animal supplies us with materials for candles, and another with soap, so that the sheep is the source, if not of "sweetness and light," yet of cleanliness and light, and cleanliness and sweetness are always understood to be near neighbours, if not closely akin. The horns are not thrown away, for they are used in the manufacture of buttons; nor the feet, for from them is obtained a valuable oil, and indeed they are greatly relished as food by the poorer parts of the population. Besides furnishing us with coats, the sheep supplies us with neat and comfortable gloves for our hands. The services he renders to us are indeed many and valuable, and hence the sheep is highly esteemed by every nation.

And what are the wages the sheep receives? Why truly he eats up a little grass, often getting a subsistence out of fields that have been cropped close by other animals. And even the fields whence he gleans his scanty meals he enriches by the manure he deposits; so that his cost to the farmer is in an inverse ratio to the services he renders.

Very large flocks of sheep are to be seen in the agricultural counties of England, but in Spain flocks consisting of as many as 10,000 sheep are not at all uncommon. So obedient and gentle are these creatures that forty shepherds with as many dogs are quite sufficient to have charge of these large flocks.

Sheep were an important part of the wealth of the ancient Hebrews. The first mention of them is in Gen. iv., 2, where we are told that Abel was a "keeper of sheep." Many of the leading characters of Holy Writ were shepherds. Both sheep and lambs were extensively used in the sacrificial offerings of the Temple service. Sheep flourished in Palestine in immense numbers in Biblical times, and sheep-shearing and other duties in connection with the keeping of sheep are frequently alluded to. The docility of the sheep, its uniform meekness, gentleness, and obedience, have furnished the basis of some of the most beautiful metaphors of the Bible. Our Saviour is called the "Lamb of God" partly in allusion to the sweetness of His nature, and partly on account of the lamb being one of the chief sacrifices of the Temple. The duties of the shepherd, to feed, to guide, to succour, to defend, have furnished the most striking figure by which Christ's care for His people is expressed: "I am the good shepherd; I lay down my life for the sheep."

With this sketch terminates our notice of the animals. Next year we must strike a fresh path, which we hope will be followed with interest and profit by our young friends. But if we have only noticed in detail a few of the animals with which the earth abounds, it is not because all the others could not be treated in the same manner and for the same purpose. A reverent and thoughtful study of the uses and habits and purposes of every creature would yield us the same or greater reasons to admire the goodness and wisdom of God. Very true are the words of Cowper:—

"Philosophy baptised

In the pure fountain of eternal love
Has eyes indeed; and viewing all she sees
As meant to indicate a God to man,
Gives Him the praise, and forfeits not her own."



PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

XII.—PRODUCTS OF SKILLED LABOUR.—GLASS.



GLASS is one of the most beautiful inventions of man. It "admits the light of the sun, and excludes the violence of the wind."

ITS MANUFACTURE

is very curious and interesting, for although glass is transparent, not one of the materials of which it is made partakes of that quality. One of the principal ingredients of all kinds of glass is *silex*, or flint, pieces of which are often seen on roads, or in thousands upon the seashore or beach. But these flints would be difficult to break, and glassmakers use, instead of them, sea-sand, which is flint already in powder. Other ingredients, such as lime, alumina, nitre, &c., are mixed in varying proportions according to the quality of glass required, some kinds being exquisitely pure and therefore expensive, while others are impure, coarse, and comparatively valueless.

Sheet glass, used so largely for domestic purposes, for the glazing of window and conservatories, for mirrors and for picture-frames, is of three different kinds, each kind being manufactured by a different process. They are crown glass, plate glass, and what is called French plate. We must describe, as briefly as may be, the mode of manufacture in each case.

Crown glass, which appears to be fast going out of use, is the worst kind of sheet glass made. It is familiar to most of us from the unsightly bull's-eye in the centre of its disc, and which used to be seen in the windows of sheds, kitchens, and workshops. It is made of fine white sand, kelp or burnt seaweeds containing soda and quicklime. These ingredients are melted in pots, placed in the midst of a strong coal-fire, within a kind of oven. When the mass is mixed it is taken out, cooled, picked over, and washed, it is then called *frit*. A certain quantity of old broken glass is next added to the frit, which is put in melting-pots, or crucibles, to be placed in the furnace. The furnace is a round-topped building terminating in a wide chimney, and is furnished with holes all round to put in and take out the pots. Within this furnace the frit in the pots is placed amidst strong flames, it is allowed to remain there until the dross rises to the top, when it is removed; the mass in the pot becomes clear, and the glass is made.

The workman now dips one end of an iron pipe into a pot, and takes out glass enough in a lump to make a sheet. He then applies his mouth to the other end of the pipe, and blows the soft glass into the form of a globe; just as bubbles of soap and water are blown from a tobacco pipe. The globe is next taken from the pipe by

another workman, upon an iron rod, to be flattened into a plate. The glass is now held upon the rod to one of the openings of the furnace until it has become hot. The workman then twirls the rod, slowly at first, and then more and more quickly, when the glass is also carried round upon the rod, until it spreads out and becomes a circular red-hot table. This spreading of the glass round the rod may be compared to the circle which spreads round a stone let fall into a pond of water. The iron rod is then removed from the centre of the plate, and leaves a coarse thick lump, called the bull's-eye. The glass is then transferred to the annealing oven, in order that it may cool by slow degrees. This annealing process, which all manufactured glass undergoes, is necessary to give it toughness; were it not annealed, it would be so brittle as to break with the slightest handling.

Plate glass is composed of fine white sand, soda, and lime, two metallic substances named manganese and cobalt, and fragments of good glass. These ingredients are mixed in due proportions, and having been cleansed of all impurities are carried to the furnace, where they are thrown into large crucibles formed of fire-clay. The crucibles, or pots, being thus charged, the doors of the furnace are shut, and a fierce fire, blown by a blast of hot air, is maintained for fourteen or fifteen hours, by which time the mixture is melted to a fluid state. The metal, as it is called, is now skimmed clear of its dross, and poured upon a hot copper-plate upon a table. As the glass spreads, all roughnesses are pressed out by passing a roller over it. It is rare, however, that the entire surface of a large casting is perfectly successful, and many of the plates have to be cut down in order to get rid of defects and flaws. This makes a large plate very expensive. After plate glass has been cast it has to be ground, smoothed, and polished. By these processes the rough plates of glass are brought to the brilliant state in which we are accustomed to see them.

French plate is made by what is called the cylindrical process. In some of its features the process resembles that adopted in respect to crown glass; but others are wholly different. When the molten mass has been brought to a convenient shape, the workman blows a little air into it through the tube; the effect of the inflation is to give it a globular form; but what is wanted is a long cylinder and not a globe; to lengthen it and effect the desired transformation, he whirls the mass high above his head and swings it alternately in the deep pit beneath him. This process is continued until the metal has expanded into a cylinder over fifty inches in length, and perhaps twelve in diameter. The end of the blowpipe is then stopped, and through the expansion of the air within it, it bursts at the extremity. When the cylinder is sufficiently cool to be handled it is slit from end to end with a diamond. It is then carried to another furnace and exposed to intense heat. As soon as it shows signs of melting, the workman thrusts a long iron rod up the centre, and flattens it out on the slab; he then changes the rod for a kind of hoe-shaped instru-

ment, with which he kneads out the sheet to a perfect level, after which it is drawn away on the slab to the rear of the furnace, where it soon becomes sufficiently cool to be removed to the annealing oven.

By a process similar to this the beautiful glass shades, which are now so common, and so useful for the preservation of delicate objects, are made.

The glass vessels in domestic use are formed of flint glass, and are manufactured by blowing, being worked and moulded into shape by the aid of a few simple tools. Phials and bottles are now made in moulds. This is a more expeditious mode, and enables them to be made nearly of the same size.

As most of our domestic glass is more or less ornamented by cutting, we must glance for a moment at the process. Glass intended to be cut, or ornamented, is made very thick, as the pattern is cut out from the surface. This is done by grinding the glass at small wheels of stone, metal, and wood. The iron wheels, with sand and water, are used for grinding away the substance of the glass; the stone wheel, with clean water, for smoothing the scratched surfaces; and the wooden wheel, with rotten stone and putty powder, for polishing.

THE ORIGIN OF GLASS MANUFACTURE

is uncertain. Josephus claims the discovery for the Israelites; Pliny assigns it to the Phœnicians, and states that the first glass-houses were erected in Tyre, where the only staple of the manufacture existed for many ages. Herodotus and Theophrastus likewise confirm the fact of the use of glass having been known in the earliest periods of civilisation, and of the establishment of glass-works in Egypt and Phœnicia, and even in India, where rock crystal was employed in its composition.

The art of making glass is reputed to have been discovered by accident. Pliny states some Phœnician mariners, who had a cargo of *nitrum* (salt, or, as some have supposed, soda) on board, having landed on the banks of the Belus, a small stream running from the foot of Mount Carmel, and finding no stones to rest their pots on, placed under them some masses of *nitrum*, which, being fused by the heat with the sand of the shore, produced a liquid and transparent stream. Nor is the supposition unnatural; for the sand at this place was peculiarly well adapted for the making of glass. Strabo and Josephus alike supported the statement of Pliny, and it is probable that from this spot the material was obtained that was used in the glass-works of Tyre and Sidon.

The process of glass manufacture as detailed by Pliny appears very much the same as that practised at the present. And Sir Gardiner Wilkinson in his work on "The Manners and Customs of the Ancient Egyptians" gives the representation of two glass blowers inflating a piece of molten metal by means of hollow tubes, taken from a painting at Beni Hassen, which was executed in the reign of a

monarch who lived about 3500 years ago ; and adds that glass vases, if we may trust to the Theban paintings, are frequently shown to be used for holding wine as early as the Exodus, about 1400 years before the Christian era. Winckelmann, a high authority, is of opinion that glass was employed more frequently in ancient than in modern times ; it was used by the Egyptians, not only for drinking vessels, but for mosaic work, the figures of deities and sacred emblems, in which they attained excellent workmanship and surprising brilliancy of colour. They also made glass bugles and beads for necklaces, and a sort of network with which they covered the wrappers of mummies, so as to form by their various hues numerous devices and figures, resembling those that are made in our bead purses. Glass was used by the Egyptians for coffins, and in 1847 a process was patented in England for making coffins of glass. A pane of glass, and numerous fragments of broken glass bottles, were discovered on the excavation of the City of Pompeii. And Mr. Layard has found that the people of Nineveh had also acquired the art of making glass. There is in the British Museum a perfect and beautiful goblet which Mr. Layard excavated from among the ruins of Nineveh. It has a name engraved upon it, and from the characters employed, and the locality in which it was found, it is believed to be of date seven centuries before the Christian era, and *probably the most ancient piece of manufactured glass in existence.*

In the reign of Tiberius glass-works were first established near Rome, and various sums were paid for vases or goblets. Glass was not only an article of luxury or ornament in the palaces, but employed to decorate altars and the tombs of the dead. Many fragments have been found in the catacombs, showing it to have been used likewise by the early Christians in their places of worship.

The Greeks and Romans were adepts in the art of imitating precious stones by coloured glass. To use the words of Beckman : " In the Museum Victorium, for example, there are shown a chrysolite and an emerald, both of which are so well executed that they are not only perfectly transparent and coloured throughout, but neither externally nor internally have the smallest blemish." The clear glass resembling crystal was exceedingly costly. Some idea of this may be gained from the statement that Nero gave for two cups of no extraordinary size, with two handles, 6000 sesteria, or nearly £50,000. There is a story told of an invention by which glass was so far deprived of its brittle qualities, that when thrown down, the vessel composed of it would not break, but merely bruise, like metal. Whether the story is true or fabulous we are not in a position to say, but it is certain that experiments have recently been made in that direction, and no doubt many of my young readers will join with me in the earnest hope that such experiments will ultimately prove a success.

OUR SUNDAY-SCHOOL ALBUM.

BY ENOCH GRATTON.

(Continued from page 300.)

XXV.—MR. DANIEL NEVERFLINCH.



E are now getting near to the end of our Album, but before we close it, I wish you to look at the pictures of three bright and happy faces; one is the face of a sweet and winning girl, another is the face of a noble lad, and the other is the face of a sturdy and energetic man, who is here very fitly named *Daniel Neverflinch*, a real, solid, persevering friend to the school and to the church, a man with clear, cool head, loyal heart, and resolute will. There is a good deal of the old Roman soldier in this friend. He is not easily moved from the post of duty. Sneers may fall upon him as fast as snowflakes, but he does not flinch; waves of opposition may dash against him until they dash themselves into feeble spray, but he does not flinch; *others* may fall away and grow weary—Mr. Wavering may falter, Mr. Dark-side may whine, Mr. Muchafraid may tremble, Mr. Tardy may loiter—but Mr. Neverflinch is undaunted to the end. When he moves, it is not with shambling foot; when he speaks, it is not with faltering tongue; there is fire on his lips, and firmness in his tread, and force in his conviction, and directness in his aim. He has stood by the school in all weathers, amid the rough blasts of winter and in the glowing heat of summer; when the school was weak and poor, and teachers were scarce, and difficulties were obstinate, and success was small. And he stands by it now it is strong, numerous, and eminently successful. I know of few schools which have prospered like the school for which Mr. Neverflinch cheerfully toils. *He* is not one of your jelly-like men who can be put into any shape, but who will not keep shape. *He* is not a reed shaken by the *wind*, or a shuttlecock to be batted and tossed by any hand. *Others* may twist and twirl, come and go, blow hot and cold, but Daniel is “steadfast and unmoveable.” He has but little patience with temporisers and trimmers, and if they happen to cross his path he is likely to favour them with a few hard, biting words of reproof, and thus he gives offence to some. If he were only a little more cautious and mild and mealy-mouthed, he would escape a few troubles; but he would be far less honest and honoured and useful. He has been connected with the school from childhood; he has filled important offices, met with stern difficulties and subtle temptations, and when I saw him he was firm as a rock and as resolute as a lion.

XXVI.—MASTER FRANK STERLING.

Do any of my readers recognise the face and name of this true-hearted lad? If they do they will readily admit that he is worthy of a place in our album, and that underneath the likeness we might fitly write these words: Tender, Trusty, and True. I know him

well, and am prepared to affirm that he is a capital fellow. He is fond of a bit of fun. He can laugh, and jump, and sing with the merriest. He is clever, but not puffed up with conceit. He has but little of French polish about him, but he has a goodly quantity of English oak. If you try in any way to test his real worth, like men try shillings and sovereigns, you will find that he has the ring of genuine coin. He has an honest open look, a true and fearless tongue, a sound and noble heart. I have often admired his diligence when at his lessons; his wakeful interest in what is said to him; his industry and energy in whatever he puts his hand to; and, to crown all, I have been unspeakably pleased to see in him the marks of a true Christian disciple. Although he has not seen more than thirteen summers, I believe he has begun to serve the Lord Jesus. I have seen his face beam with joy while listening to the story of our Saviour's love and beauty. I have seen his eye moistened with tears when his ear has drunk in the story of our Saviour's agony and shame. Frank knows his Bible well, and when questioned concerning the contents of that best of books his answers are prompt and intelligent. He has the rare privilege of having an exceedingly good man for his father, and a gentle, prayerful woman for his mother. He reverences and loves them, and they think a world of him. Let us pray that he may fulfil their brightest expectations.

XXVII.—RUTH CHEERFUL.

This carte is last in our album, but it is not the least worthy and valuable. The girl it faintly and dimly represents is just one of the sweetest and bonniest girls I ever met with. Like Frank Sterling she is blessed with good Christian parents. In this respect she has the advantage over poor Mary Sorrowful, the drunkard's child, whose likeness I called your attention to some months ago. Mary is now in heaven. Ruth is still living, and is the pride of her parents, the joy of her teacher, and the friend of her pastor. Men of science tell us about "bottled-up sunshine" hidden deep in the earth in coal-beds. Well, there is a lot of sunshine in Ruth, but it is not bottled up, it bursts forth, brims over—beams in her eyes, rings in her voice, shines on her pathway. She "carries music in her heart;" "scatters sunbeams" by her smiles and deeds. Her obedience is cheerful. The commands of her parents and teachers have no need to be repeated, and followed by threats and blows in tears. She obeys readily and gladly. When asked to get her lessons, *she* does not shake herself—do *you*?—and whine and weep. When sent on errands, she does not curl her lips, hang down her eyelids, and say, in whimpering tones, "I don't want to go;" on the contrary, she says quickly, "Yes, Ma," "Yes, Ma, I will go," and she does go and is soon back again; love impels her, and nothing impels like true affection.

"'Tis love that makes her cheerful feet
In swift obedience move."

Ruth is a beautiful girl ; she has not only beauty of form, feature, and expression—the light and purity within shine out in her lovely face. She, too, is a disciple of Jesus. She has given herself to Him who is the rose of Sharon, the lily of the valley ; it is this which gives the richest bloom and sweetest fragrance to her character and life. Ruth, though young, has made a wise and noble choice. She has chosen God for her Father, Christ for Friend and Saviour. Will you, my dear reader, at once, deliberately and heartily, make this blessed choice ?

Now, in closing this album, let me assure you that the characters which have been sketched in this homely chit-chat fashion are not merely imaginary persons. They are honest, though imperfect, descriptions of persons whom I have met with. Some in one county, some in another, some in small country schools, some in large town schools. For many years I have taken a deep and growing interest in Sunday schools. I have mingled freely both with teachers and scholars ; watched somewhat closely the work in the class, the committee-room, and in the teachers' meeting ; I have made myself acquainted with the names and faces of the teachers and scholars ; consequently it has been no very difficult thing for me to call up the various likenesses which have during twenty years been photographed upon my mind and heart. And why have I taken this interest in Sunday-school work ? Partly because of the vast debt I owe to the Sunday school. No writer for the JUVENILE INSTRUCTOR, and no reader of it, owes to the Sunday school a larger debt than I do. That debt, as far as possible, I would most cheerfully pay. I rejoice to think that the higher mission of the Sunday school is being more vividly realised and powerfully felt. Never before was so much done in our country to gather the young into the fold of Christ as is being done now ; but still there is room for improvement, and if all our teachers will try to become like John Winsome, Miss Neverfail, and Daniel Neverfinch, and all our scholars like Frank Sterling and Ruth Cheerful, what a blessed change we shall soon see in our country !

ADDRESSES FOR JUVENILE MISSIONARY MEETINGS.

IV.

DEAR FRIENDS, I've a duty that's not very light,
But it's needful I think you'll admit ;
And if you will grant me a few minutes' grace,
I will treat of finances a bit.

Though "money's the root of all evil," folks say,
It is also the means of much good ;
Without it the grandest of movements would fail,
And send missions without it who could ?

You have heard what we're doing in Mission'ry work
 In our various stations abroad,
 And will freely admit that to carry it on
 Great expenses must needs be incurred.

Nearly five thousand pounds were expended last year
 In our own Mission'ry enterprise ;
 And this year I doubt not much more will be spent,
 For each year the cost seems to rise.

Towards this outlay our Society here
 Has yearly subscribed a fair sum,
 And in order to send it as usual this year
 To you for assistance we come.

Now, do not refuse us, and say "trade is bad ;"
 We know it—we've heard it before :
 None hear of bad trade so soon as do those
 Who for charity plead at the door.

'Tis because trade is bad that we eagerly ask
 For your help in the meeting to-night,
 Since from boxes and cards, as you heard it read out,
 The proceeds have proved very light.

Our Mission'ry boxes have only caught pence
 Where aforetime a sixpence was got ;
 And young Johnnie's pennies to ha'pennies have shrunk,
 And Billy has his quite forgot.

The cards too have realised less than they did ;
 It was really hard work to collect,
 For nobody seemed to possess any change,
 And silver we could not expect.

Some gave us their pence with a bright cheerful smile,
 Some grumbled—but gave, into that,
 Some gave all they could—an encouraging word,
 And some seemed to grudge even that.

So to you we must look to raise the amount
 As near to last year's as you will,
 And even if more than that sum should be raised,
 There'll be room in the Mission'ry till.

We don't ask a penny that you cannot spare,
 Just give as your means will permit ;
 But perhaps there are some whom bad trade don't affect,
 If so, friends, just help us a bit.

TOM BROWN.

SUNDAY-SCHOOL DEPARTMENT.

—o—
 SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.
 DECEMBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
2 Spies sent out.....	Num. xiii. 1-8, 17-8	8] 1 Cor. x. 11. -
9 Israel's Unbelief.....	Num. xiv. 1-10, 26-3	1] Heb. iv. 11.
16 Moses' Last Blessing.....	Deut. xxxiii.	ver. 27.
23 The End of a Noble Life	Deut. xxxiv.	Rom. xiv. 8.
30 God's Mercies to Israel ...	Ps. lxxviii. 1-8, 25-	39] Ps. ciii. 2.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
2 The Deliverance.....	Acts xxvii. 27—44	Ps. cvii. 30.
9 Paul in Melita.....	Acts xxviii. 1—15.	Rom. i. 14.
16 Paul at Rome	Acts xxviii. 16-31.	Rom. i. 16.
23 Paul's Last Words.....	2 Tim. iv. 1—18...	ver. 7.
30 Review of the Quarter's Lessons		Phil. iii. 7.

Poetry.

PRACTICAL PROVERBS.

VIRTUE ne'er dwells within that heart
 Where shame has ceased to hold a part.

Whene'er a good man comes to thee
 Examine not his pedigree.

'Tis by his deeds and not his gown
 A pious man may best be known.
 If you a gentleman would know,
 'Tis he whose deeds proclaim him so.

A word's a thing that flies away,
 But writing may be made to stay.

If youth had wisdom, age had power,
 Naught would be wanting for an hour.

You ne'er should say, and ne'er should do,
 The word and deed wrath prompts you to.

Folly and anger are the same,
 The difference is but in the name.

He who once proves himself a knave
 Doth seldom change this side the grave.

To others pardon e'er bestow,
 But to thyself no mercy show.

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THE
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AND
COMPANION.

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TO THE YOUNG PEOPLE

IN OUR

SUNDAY SCHOOLS AND FAMILIES,

AND

TO OUR READERS GENERALLY,

THIS,

THE TWENTY-NINTH VOLUME

OF THE

JUVENILE INSTRUCTOR,

IS DEDICATED

By the Editor.



AGE AND INFANCY.

AGE AND INFANCY.



IN our picture this month we see illustrated the words, "One generation passeth away, and another generation cometh." The departing generation is represented in the old gentleman who has evidently nearly counted out the days allotted man to live here, and the coming generation is represented by the child he so fondly embraces. Now this intermingling of ages, this blending together of the old and the young, is a very wise and beneficent arrangement of our Creator. It would be a poor world for grown-up people if there were no children in it, and little children too. I do not think I should care to stay in such a world long. How cheerless would the old gentleman in our picture be if everyone else were as old as he! How pleased he seems because he can take that little child on his knee, or press it to his bosom! But suppose there were only children in the world! Why, that, I think, would be worse still. The children, I am sure, would be much to be pitied; for their lot would be a very sad one. Don't you children who are reading this think so? What would you do if in your homes there were only boys and girls like yourselves? You reply, you could not live if it were so. And no more you could.

But why are there grown-up people in this world? You don't suppose, surely, that they are there merely to find you food, and clothing, and to build houses for you to live in? They are there for those things, and for something besides as well.

You come into this world not always to be children. Every child grows and gets older. At first you are called infants (that is, little things), then you are called children, then youths, then young men and women, and so on till, unless you are carried away by sickness or accident, you become old and feeble, and the time comes that you must go the way of all the earth.

Now all life is given for a purpose. It is so with the life of a flower, it is so with the life of a tree, it is so with the life of an animal, and it is so with the life of every human being. You know what the hymn says:—

"A charge to keep I have,
A God to glorify;
A never dying soul to save,
And fit it for the sky."

And then the next verse tells you how all this is to be done; your charge kept, God glorified, and your soul saved:—

"To serve the present age,
My calling to fulfill;
O may it all my powers engage
To do my Master's will!"

We do not know how to live this life of ourselves. If you were to take a child, and never allow it to be taught and trained, that child would not grow up living a right life. You read in the Book of Job that man is born like a wild ass's colt. You will know, I think, what that means. It is intended to show us that we want teaching and training, and must be put under discipline, if we are to be what we were meant to be by our Creator.. It is, therefore, the duty of older people—people that have had experience, and got wisdom from their experience—to give the benefit of this to younger people. In this way men and women can go on constantly improving, each generation becoming wiser and better than the former generation. And therefore, also, it is the duty of children and young people to attend to the counsel given them by their elders, their parents and teachers, that they may become as wise and good as they should be. Our magazine is called the JUVENILE INSTRUCTOR, and in preparing it we have always the improvement of young people in view, and we would fain hope that by many of them our pages are not only read, but what is read is considered and attended to in the daily life of the reader.

J. HUDSTON.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 75.

From TED INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park,
London, Dec. 28, 187—.

DEAR OLD CHUM,—

How are you enjoying this glorious Xmas weather? Isn't it a wonderful change from last week? It is gloriously clear and bright even in this city of fog and smoke, so I don't know how nice it must be in your charming country village. I really believe we shall have ice before we go back to school. I have looked up my skates for it already.

I am enjoying my holiday very much. As I told you in my last hurried note, I went to a party on Xmas Eve. It was at a large house on the other side of the park, and there were over twenty of us young folks there. We had all sorts of games and forfeits, and at the finish there was a great Xmas-tree lighted up.

But I am actually forgetting to tell you what pa brought me for my Xmas box. You would *never* guess. It was a real box. I'll tell you. You recollect how fond I was when at your house of begging a few chemicals from your father's bottles to make coloured fires and other experiments with. Well, it seems pa has had an idea for

some time that I might get fond of chemistry. So on Xmas morning, when I came down to breakfast, I was delighted to find a package awaiting me on my chair which turned out to be one of Statham's Chemical Chests, with a book and all the apparatus to enable me to practise over a hundred beautiful experiments. So, unless I should be as unfortunate as some of the alchemists I have read of, who managed to burn themselves to dust in the vain attempt to change other metals into gold, I shall come back to school very learned in chemistry, and able to solve the mysteries of the composition of gunpowder, laughing gas, &c., &c.

Give my kind regards (in which all at home join) to your father, mother, and sisters, I remain ever affectionately, your old roommate.

TED INSTONE.

Letter No. 75.

FROM BEN BARLOW TO TED INSTONE.

The Laurels, Woodbourne,
Dec. 30th, 187—.

MY DEAR TED,—

Your jolly letter came duly to hand. Like you I am overjoyed at the prospect of a hard frost, but I am almost afraid to hope for much skating. You see the change was so sudden, and the weather might turn mild again any night. However, we must hope for the best.

I am glad you are enjoying yourself. I hope you'll neither poison yourself nor blow off any of your fingers with any of the chemicals your father has given you. I really think you have a taste for chemistry. I like to *see* coloured fires and crystals, and all that sort of thing, if somebody else will take the trouble to make them; but I've no patience to make them *myself*; they take so much time, and you have to be so exact in mixing the things, and you must wait so long for them to dry, that I get thoroughly tired of them before they are finished. A canter round the common, or a good game at "bandy," is worth all the experiments ever made—so I think.

But would you believe it, I have taken to reading this week! There's no mistake about it! Yesterday I actually did not want to put down my book to have dinner. Father says he never expected to see the book that would come between me and my meals. And you know I am generally ready for my dinner at school. It is a book father bought me for my Xmas box—"The Swiss Family Robinson." It is something like "Robinson Crusoe," only instead of one man there is a whole family shipwrecked. They meet with the strangest animals and birds I ever read of or heard of, but the father seems to know all about everything. If he only sees the last joint in a serpent's tail, or a footmark on the sand, he can at once tell all about the reptile or the animal, as the case may be. It is a splendid book, and almost every page has a picture on it. I shall bring it with me when I come back to school. I know you will like it as well as I do.

Don't think I have done nothing else but read all the week. We went to a little party at the Rectory on Monday night, and I enjoyed myself very much. Of course it wasn't anything like so grand an affair as you have in London. To-night a lot of us are going to the Old Mill. We shall have romps and such like till after supper, and then Tom will exhibit his magic lantern in their big kitchen. It is rare fun. I have seen it several times before, but I always have a good roar at the comic slides—men with noses that grow longer and longer, cabbages that change into girls' faces, and such like.

To-morrow night is the annual Church tea-meeting, and the drum-and-fife band is actually going to perform two or three pieces. I have been helping to decorate the room to-day. Half-a-dozen of us were off by six o'clock this morning to get evergreens. It was jolly! Of course we got the holly, ivy, and yew out of Upleigh Wood; but the mistletoe and laurel Jno. Williams and I fetched in a trap from a gentleman's place about six miles off, where Mr. Jones had got leave to get what he wanted.

Talking about the band, who do you think plays the big drum? Our Bob! They never told me of it in the letters from home, but kept it for a surprise. Mr. Jones says he keeps time very correctly. He always was a good whistler. Tom Blunt comes sometimes to practise with Bob in the harness-room, and a pretty row they make with their two drums.

Charlie Thornton had a holiday on Xmas day, of course. We went a long walk together, and had a big batch of talk. He seems very much older than he did, and is getting quite thoughtful and serious. He appears to be going on well at the office. He sends kind regards to you.

I have made this a long letter for fear I might not have time to write again for a long while. Father has told me I may ride the cob every other day while I'm at home, so what with that, a few little parties, and "The Swiss Family Robinson," I don't expect to have much leisure. With kind regards, your old friend,

BEN BARLOW.

P.S.—Father and mother and sisters join me in wishing "a Happy New Year" to yourself, and all at home, not forgetting little Ernie.

Letter No. 77.

FROM TED INSTONE TO BEN BARLOW.

3, Brighton Villas, Regent's Park,
London, Jan. 3rd, 187—.

MY DEAR BEN,—

Your last letter was such an interesting one that I hope you will be able to write another or two like it before our holidays are over.

I spent almost all my leisure last week in experimenting with my chemicals. At first I had them in the kitchen, but now I am expelled those comfortable quarters. I had the misfortune to stain two or

three of cook's aprons, and on Friday I was mixing some fulminating powder, and happening to strike the mortar a bit too heavily with the pestle, the whole lot went off with a flash. Happily I wasn't hurt at all; but the explosion filled the kitchen with sulphurous smoke, and frightened Mary almost out of her wits.

So now she won't let me come near her with my "fiery brimstone an' sich like," and I have to experiment in the lumber-room, where I can't have a fire. I hope the scientific world won't suffer too much from the loss of the discoveries I might have made, but while this cold weather lasts, at any rate, my love of warmth and comfort will be stronger than my fondness for chemistry.

I begin to think your fears about the weather will prove well grounded. It must be considerably warmer, for there wasn't a particle of ice to be seen this morning, while two or three times last week there was ice on some parts of the Serpentine as thick as a shilling.

Let me know how the tea meeting went off. I should like to hear whether Bob thumped the head of his drum in under the excitement, or if Tom Blunt got nervous and sent his drumsticks flying among the audience.

I envy you the trip you had to get the evergreens. I feel as if I should just glory in cutting down the holly and ivy, and carting it off. We never see any holly-berries growing here.

But I am forgetting. John and I are going to the Polytechnic this evening, so I must go and get ready at once. I'll tell you all about it in my next.

With best wishes to all, I am, your old friend,

TED INSTONE.

P.S.—Ernie has just asked me to say that the rabbits are doing very well. They are just now enjoying a sprig of holly, of which they seem as fond as a donkey is said to be of thistles. They certainly don't look like dying either of hunger or cold, for they are as plump as possible, and their hut is fixed against the wall at the back of the kitchen-range—the warmest place we could find, unless we put them in the fire itself, and I suppose that would be a little too warm, even for rabbits.

Letter No. 78.

From BEN BARLOW to TED INSTONE.

The Laurels, Woodbourne,
January 12th, 187—.

MY DEAR TED,—

I told you I was afraid it might be a long while before I had time to write again, so I hope you have not felt hurt at what seemed like neglect.

I have been having jolly times, I can tell you. I have been off with the cob almost every other day, cantering through the country lanes, sometimes alone, and sometimes with Tom Blunt.

Last Saturday there were five of us. John Williams had his father's lightest cart-horse, Edgar Foster borrowed his uncle's mare, and Mr. Blount found a mount for Charlie Thornton—he having a half-holiday; of course Tom Blunt had his own pony, and I had father's cob. We started off directly after dinner, and struck across the common, intending to ride round Upleigh Wood and Cropstall, and come back through Hammerthorpe.

I must tell you that Tom Blunt and Charlie Thornton are capital riders, and had good horses under them. Edgar Foster is one who goes at it "neck-or-nothing" style, but the mare he had borrowed is known all round Woodbourne for her tricks. John Williams is awfully timid on horseback, so it was a good thing that his horse was a steady-goer.

We started together from opposite the church, but before we were half-way over the common we found John and Edgar had fallen behind. On stopping to look back, there was John Williams' "Dobbin" plodding slowly after us like a well-trained funeral-horse, and Edgar Foster's mare was standing stock-still, with her forelegs firmly planted in front, as if to resist all arguments to advance.

We rode back to see what could be done, and as it was evident the old mare had a dislike for the Hammerthorpe way, we resolved to humour her, and turning round, walked all our horses through the village towards Tinbury. We had hardly got into the lanes on the other side of Woodbourne when Edgar's horse suddenly stopped again. We coaxed and encouraged her, and as that did no good, we applied the whip; but that only made her wheel round and launch out viciously with her hind legs. There she was, turning round and round, first one way and then another, and after half-an-hour's trouble we hadn't got a dozen yards further up the lane.

Our horses were getting tired of watching this circus practising, so we made up our minds to start off and leave poor Edgar to do the best he could with his unmanageable steed. So the four of us broke into a trot towards Woodbourne. Just then one of Pickford's empty waggons, drawn by three galloping horses, came rumbling and rattling down the hill from Tinbury. Perhaps Edgar's mare was startled at the jingle of the harness and the roar of the wagon, or possibly she was tired of her tricks. At any rate, she at once started off at a tremendous pace, and dashed through the thick of us. If Edgar had not had a firm seat he must have been pitched off. As it was, John Williams was far more frightened than he, for he made sure he would be upset when he heard the old mare following us. We had something to do to overtake Edgar now that his horse was inclined to go, but after the first spurt was over there was no more trouble with her all the afternoon.

The tea-meeting was quite a success. The band played very well indeed. If I were not coming back to Worcester I believe I should join it. You wouldn't think how stylish our Bob looks in the band uniform. It is dark blue, with white facings.

I think you had better be careful what you are about with your medical chest, or you father will find it the most expensive piece of furniture he ever introduced into the house.

My paper is filled up, so with love to you all, I remain,
BEN BARLOW.

Letter No. 79.

From TED INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park,

London, Jan. 17th, 187—.

MY DEAR BEN,—

Thanks for your interesting account of your equestrian performances. Your friend Edgar's steed must have been a lineal descendant of the horse of which John Gilpin had to say, "I came because your horse would come."

I promised to tell you all about what we saw at the Polytechnic; but it would want a quire of foolscap, and a great deal more patience than I possess, to tell half the wonders we witnessed. There were Professor Pepper's Ghost Illusions, a lot of Electrical Experiments, a Sensitive Flame that danced up and down to a tune, and, last of all, a man dipped his hands in molten lead and walked barefoot on hot iron without getting burned. But I must tell you all about these things when we meet again at school. They will do capitally to talk about at night after we are in bed.

I am beginning to get just a bit tired of my holidays. All the Xmas fun is over, and the mince-pies are all eaten. If it were fine weather I might go out; but for the last three days we have had dull, unpleasant, foggy weather that makes one doleful indoors or out.

I should find plenty to do with my chemicals, I daresay, if they were in a warm room; but less than an hour in their present cold quarters is enough to set my limbs trembling and my teeth chattering.

I suppose it was the cold numbing my fingers and making me clumsy that caused me to cut myself yesterday. I was making a cork to fit a glass tube, and somehow my penknife slipped and cut an ugly gash in my left hand. To make it worse, I wrapped my hand up with a handkerchief which I had foolishly used a minute or two before to mop up some very strong acid I had spilled. Didn't it make me dance! I'm afraid if you had been here you would have laughed heartily at my grimaces, though I assure you I felt more like shouting. With kind regards, I am, yours affectionately,

TED INSTONE.



THE PRISONER'S CHILDREN.

By MRS. MELDRUM, *Author of "NED'S SEARCH."*

CHAPTER I.—"LEFT TO THEMSELVES."

LU! there's a band coming; lift me up quick!"

The tone was almost fretful in its eagerness, but Lucy turned at once, and, taking the child in her arms, mounted the broken steps into the street and stood on the hot pavement in the full glare of the mid-day sun.

"Oh, look, look! all them flags, and what a lot of children! Aren't they nice, Lu!"

"I can't hold you any longer, Willie, it's so hot." And the girl stooped and placed him on the ground.

He was very small, and so crippled that his only way of moving was a difficult kind of shuffling along by aid of his hands.

"Do hold me up, Lu!" he entreated, trembling in his voice, showing that tears were near. "I can't see nothin', and they'll be all gone directly."

"I can't; you're so heavy, an' it's so hot."

"Bring him up here," said a kindly voice from the window above them; "he can sit on my top step and see over all their heads."

A flash of delight succeeded the look of blank disappointment on the boy's face as Lucy carried him up the high flight of steps and seated herself there beside him. As the woman had said, they could see over all the heads, which were not a few, for festive processions were rare in Totten Street, and young and old had come out at the first sound of music.

"They're nearly all children, Lu!" exclaimed Willie, as the ranks of happy faces passed along. "I wonder where they're going, don't you? Oh, see, there's a flag with a big picture on it—there, that blue one with two big poles and some strings that them little girls in white frocks is holdin'."

"Yes, I see it," answered Lucy, with a little animation, as Willie finished his speech with a clap of delight. "It's got a lot of lambs on it, and some readin'. I wish I could read, I do."

"Why don't you learn?" asked the woman, who was now standing in the open doorway.

Lucy looked up, pushing back the rough black hair from her forehead, "Who'd learn me?"

"Couldn't your father and mother send you to school?"

The rough black hair was thrown back with a hopeless, desponding shake. "We've got no mother, and I'm sure father won't."

"That's a pity; but did you ever ask him?"

"No I never thought about it," replied Lucy; "but I know 'twouldn't be no use. I've got to mind the shop, an' take care of

Willie, an' carry father his dinner. Oh, no, it's no use to want to go, 'cause I can't get to, I know."

"See, there!" shouted Willie; "see that little fellow in a straw hat! I'm sure he's lookin' straight at us. What does he want?"

"Why, bless him, it's my Bernie, an' me forgetting to look out, after promising him I would!" And Mrs. Kelly took off her holland apron and waved it in reply to the eager face of her boy.

"What's your boy there for?" asked Willie, whose natural shyness had disappeared under the temporary excitement of sight-seeing. "What are all those boys and girls there for, eh?"

Mrs. Kelly was shading her eyes with her hand to watch the last glimpse of her Bernard; but as soon as he had turned the corner, she answered, pleasantly, "My Bernie is a Band of Hope boy, and his school is going to meet a great many others and go into a gentleman's garden and play games and have tea and sing hymns."

"How nice!" exclaimed Willie. "Could anybody go that liked?"

"All the Band of Hope boys and girls, and, oh, yes, other people too. Bernie sadly wanted me to meet him there, but it's a long way, and I'm busy with only moving here this week. His father'll go after tea."

"I never seen you before," said Willie. "I'm glad you've come instead of old Jenny. She ran at me with a long brush for sittin' on her steps once, didn't she, Lu?"

"Yes; but come along, Willie, they're all gone now."

"Well," said Mrs. Kelly, patting Willie's head as Lucy raised him in her arms, "you'd better go now, because I am busy, you see; but another day you must come again and see my boy, and he'll show you some of his Band of Hope books with pictures in; he's got some beauties, and he'll tell you the tales about 'em too."

"What is Band o' Rope, though?" queried Willie halfway down the steps.

"Bernie'll tell you some of these days;" and nodding kindly at the children, Mrs. Kelly went in and shut the door.

"Wish father had taken his dinner with him; he might just as well have done 'stead of me havin' to go all that way, an' I'll be late, too, now an' have to run."

"Can't I go?"

"Oh, no, Willie, not to-day. I couldn't carry you, and I'll have to hurry so. You mind the shop, that's a good boy. Suppose anyone came and we was both out!"

"Well," assented the child, with a sigh, "but be quick back, Lu."

"I'll be as quick as I can, but it's a long way, and I have to call for father's beer. Now, Willie, let me lift you up."

And accordingly the little boy was placed in one corner of the window ledge, which ledge contained what Lucy dignified by the name of shop, and whence, if a customer should chance to come in, Willie could reach to supply his wants. Well might he beg his sister not to be long, for, happen what might, there he must remain

until her return, his only diversion to watch the flies buzzing about the dust-covered window and its contents.

Here were ranged indiscriminately pipes of red toffy and pipes of white clay, soiled cotton-reels and balls of worsted, marbles, tops, rough wooden battledores and gaily-painted shuttlecocks, some stale gingerbreads and a handful of nuts, two or three green glass jars of old sweets, and a number of stone bottles in fulfilment of the printed notice outside, "Prime pop sold here."

Willie knew the little stock by heart, and though fond of sweet things, would never have dreamed of helping himself to a sweet, or of refreshing himself with the contents of one of the stone bottles. Very tired and thirsty he felt as the hours of the afternoon drew themselves slowly along, and at length, leaning forward till his head rested against the glass, he forgot his loneliness and weariness in sleep.

He was roused by hearing Lucy's step, and called to her to come and lift him down. "There's not been nobody in all afternoon, Lu, and it has been such a long long time. What's the matter?" he continued, as Lucy threw herself down on the floor and, burying her face on an old chair, cried as if heart-broken.

"Lu, Lu, do lift me down," he shouted. "I'll fall off if you don't, and then I'll be killed."

Thus stimulated, Lucy complied so far as to set Willie on the floor, and then, seating herself, rocked to and fro, still covering her face with her hands.

Willie worked his way to her across the floor and commenced pulling at her frock-skirt. "What's to do, Lu? Why won't you tell me? Was father cross 'cause you was late with watching the Band o' Rope children? Did he scold?"

Lucy shook her head, then stooping raised her little brother on her knee, and, wrapping her arms round him, whispered, "They've taken father up for fightin'. I saw him—it was dreadful—but the other man fought him too."

"And where did they take him, Lu?"

"To prison, Willie, an' he told me he shouldn't get out for a long while. I ran along aside of him, an' asked the p'lice to let him go; but they wouldn't, and he said it was no use, an' I must take care of you, Willie; but how can I? what must we do?" and Lucy leaned her head on the child's and sobbed bitterly.

"Don't, don't, Lulie; we'll manage somehow for a bit, and I daresay he won't be in long. Was father drunk, Lu?"

"Not when he was talking to me he wasn't, but he said he was when he did it. A lot of ladies and gentlemen came to look at the new resevy, and he showed 'em all about it, an' how big it was to be, an' how the water would come to town out of it, and one of the gents gave him some money, an' he said he was so thirsty, an' it got in his head."

"I wish they hadn't given it him," said Willie, sadly; "he wouldn't have done it p'raps only for that."

"No, but they didn't know he'd get drunk for having some money given him; p'raps they thought he'd bring it home to us. He gave me two shillin's, Willie, and that's all we've got to live on till he comes back."

"Two shillin's is somethin', Lu," said Willie, brightening up. "I thought we'd got nothin' at all. Let's have our tea now, 'cause I'm so thirsty."

"Well, I s'pose we've got to live. Sit there then, Willie, an' I'll get some bread an' cheese, and we'll have water to it, 'cause it'll save lightin' the fire, an' it's so hot."

"I like my tea properly," murmured the boy. "I don't want water."

"You can't have it then," was on Lucy's lips; but the remembrance of her father's injunction. "Take care of Willie," and the sight of his pale, tired face, touched her, and producing the remains of an ounce of tea, and lighting a little fire, she prepared him a cup of the weak but welcome refreshment, contenting herself with water.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXIII.—INSECTS.



THE study of these small creatures is not a trifling affair. Though each individual is small, their total numbers are far greater than those of all other animals put together; and the diversity of their structure, their singular beauty and wonderful instinct, have attracted the notice, and excited the astonishment, of the most gifted philosophers. The almost fantastic variety of their forms, and the beautiful adaptation of their various parts, their method of subsistence and their changing life, constitute a remarkable proof of the wisdom and goodness of the Creator. The same Supreme Intelligence which has fashioned the elephant and rhinoceros, and provided for their maintenance; which has created the sea as the reservoir from which daily supplies of water are drawn for the use of the entire world, and ordained the mountains as heaps of virgin earth gradually to enrich and fertilise the exhausted soil; which, by a simple and beautiful contrivance in varying the movements of the planetary orbs, has produced their different lengths of day and year, and alternations of seasons—the same Supreme Intelligence is manifest in the formation and habits of the minutest insect.

If the Deity did not think it beneath Him to create the insects that everywhere abound, it cannot be beneath us to study them. The invention of the microscope has opened fresh sources of information and given a wonderful aid to the study of entomology. The head of

a fly is seen to be covered with beautiful flowers and diamonds. The wing of a gnat, that at first sight looks altogether worthless, appears as smooth as glass, and glows with all the colours of the rainbow. The dust that rests on the body of a moth is seen to be a vast collection of minute feathers as beautifully proportioned as the splendid plumes of the ostrich.

The word insect is derived from a Latin word which means to cut. It is applied to all those little animals, whether they fly or creep, or both, which are composed of two or three principal parts that seem almost cut asunder, but which are connected by a thread called a ligature; to all that have scales that slide over one another; and to all that have several rings that shrink from or approach each other in a common membrane that collects them. Of the first sort are ants and spiders, that seem almost separated into several parts. Of the second sort are maybirds and many kinds of flies, which are clothed with an assemblage of little scales that expand by unfolding, and contract by sliding over one another. Of the third sort are worms, which when they would pass from place to place advance the first ring, and then, by contracting and expanding the skin of that part, move the second ring, and so on to the others, until the whole body moves along.

We are compelled by their very minuteness to admire the art and mechanism in their structure; so many limbs, organs, vessels, etc., associated in a point almost imperceptible. Their clothing displays a profusion of azure, green, and vermillion, gold, silver, and diamonds. The common butterfly or bee is clothed with astonishing magnificence; Solomon in all his glory was not arrayed like one of these. They are armed with appropriate weapons for assaulting their enemies or defending themselves. Many of them are provided with strong teeth, a double saw, a sting with two darts, or with vigorous claws, and a coat of mail often covers the whole body. Those that find their safety not in resistance, but in flight, have wings to fly with, or they have a thread which they can lengthen or shorten at will, which supports them when they cast themselves a great distance and fall from the leaves on which they live. Where strength is not given, stratagem or concealment supplies its place, and though they have many enemies, a sufficient number of the various species is always preserved.

The implements they work with are a truly wonderful illustration of the wisdom of the Creator. Some spin, and have a couple of distaffs and fingers to form a thread; others weave nets, and for that purpose are provided with shuttles and thread. These were the original spinners and weavers, and plied their trade long before the first mill was erected in the busy towns of Lancashire. There are some who build in wood, and are supplied with instruments after the style of axes to cut their timber. Others make wax, and have their shops furnished with ladles and trowels. Most of them have a trunk which is more wonderful for its various uses than that of the

elephant. Some use it for a tongue; others as a drill for boring; most of them as a reed for suction. Some whose heads are fortified with a trunk, a saw, or a couple of pincers, carry in the other extremity of their bodies an auger which they can lengthen and turn at discretion, and so dig commodious habitations for their families in the heart of fruits or under the bark of trees, in the thick part of leaves or even in the hardest wood itself. Many of them have excellent eyes, and horns or antennæ to defend them. As the insect moves along in the dark, these horns are outstretched to make a trial of the way, and whatever is dangerous is avoided. Many have the gift of flying: the dragon-fly has four large wings which correspond with the length of its body. Where the wings are of such exquisite fineness that the least friction would tear them, the insect has two strong scales which rise and fall like another pair of wings, but which are only a case for the protection of the real wings.

If we compare their organs with the tools of our best mechanics, it is only to discover the inaccuracy of our own works and the infinite superiority of those of Nature. When the sting of a bee is looked at through a microscope, it is seen to be beautifully polished from end to end, and the point to vanish from its very fineness. What we call the sting is not the sting really, but only the sheath from which the bee launches two little darts of inconceivable fineness. And when the finest needle is looked at through the same glass, it is seen to be all rugged and blunt, like a bar of rough iron from a blacksmith's shop. The finest and most delicate work of man displays ruggedness and inequality, but the finest works of the Creator exhibit no flaw when examined with glasses of the highest possible power.

It is commonly said that insects are engendered from corruption, because they are seen to proceed by thousands from corrupt and putrified matter where there was no sign of their existence before. A moment's reflection will show the error of such an opinion. The corruption of a body is simply the dissolution of its parts. Can it be supposed that matter by its mere dissolution can all at once form an organised body, with eyes and heart and intestines, with wings, feet, and horns, with all the constituent parts of a living animal? The truth is, every individual insect has its parents just as much as larger creatures. It is as wise to say that forests engender lions and tigers as to say that a piece of cheese generates mites; as wise to say that towns engender men and women as to say that putrid matter engenders flies. Lions and tigers are born and live in woods, and mites in cheese; men and women are born and live in towns, and flies in decayed matter; but they all alike owe their being to others of their kind that lived before them. Insects are born in corrupting matter simply because other insects had previously deposited their eggs there. Wherever there is impaired organic matter, there is the best possible nourishment for their young, and insects flock to it as by a common impulse. The odour exhales to a great distance, and is readily detected by their acute senses. Throughout every order of

animal existence, the mother by instinct adopts the best arrangement for the comfort of her young. When the silkworm feeds at large in the fields it never lays its eggs anywhere else but on mulberry leaves. Caterpillars lay their eggs on the leaves of the various vegetables or trees most suitable to their various kinds. Moths seek for clothes and woollen stuffs; flies on the contrary seek for putrid meat. When the access of flies to meat is barred it will decay just the same, but no flies will ever be produced by it. It is just as natural for flies to lay their eggs on decaying matter, as for a bullfinch to build its nest and rear its young near a lot of gooseberry trees. And reflection points out here one of the many great purposes that insects serve. If left exposed, corrupt animal and vegetable matter would [make the air noxious with pestilential vapours. God has accordingly called into existence innumerable busy little creatures who feed on what would injure us, and so keep the air pure for the purposes of respiration.

Many insects go through a variety of wonderful changes, though others, like the snail and the spider, always retain the shape they first take on bursting from the shell. The butterfly and many others on coming out of the shell are no more than little worms. They live in this form for awhile, sometimes changing their attire and assuming different appearances, and then pass into an intermediate state called the chrysalis. On bursting this enclosure they become flying creatures, and unfold their wings, and pass gaily through the air. The dulness of their previous state they leave for colours of the most beautiful glow. The gross food that once fed them they desert, and in a life of aerial pleasures range from flower to flower.

This change has been extensively regarded as a beautiful illustration of our own resurrection. The eyes and feet and body of the caterpillar are quite different from those of the butterfly. And indeed in the chrysalis the animal is divested of head, eyes, and body, and in an evident state of death. Take away the head and body of any other creature, and you take away its life, for the destruction of its parts is necessarily the destruction of the whole. But in the case of many insects their apparent death is but the beginning of a new and brighter existence. The first animal is no stranger to the second; it prepares for its change. The care with which it builds up a temporary home for the spoils of the old insect intimate its expectation of something better. It is not affrighted at death, which is indeed but a passage to a more exalted state. With joy it exhausts its strength and substance to prepare its own winding-sheet, and it dies like a grain of corn whose constituent parts are dissipated under the earth to foster the green and beautiful plant that springs from its remains. So from the present state Christians may expect to rise into a more exalted and ennobled state of being, having enlarged powers of intellect and of motion, and drinking in purer and more lasting pleasures. The change from the dull creeping caterpillar to the gay glancing butterfly that joyously floats in the sunbeams and

lives on the flowers, is a hint of the glorious transformation we shall experience when this mortal puts on immortality, and this corruptible is clothed with incorruption.

DAISY BANK;
OR, SISTER ELLEN'S MINISTRY.
By J. CAPES STORY.

CHAPTER I.—A WIDOW'S BLESSING.



IT was late in the afternoon of a winter's day in one of the large towns of England. A leaden dulness was in the sky, and the cold was so intense that the very houses of brick and stone seemed to feel it and to draw themselves together yet more closely, as though they were trying to keep themselves warm and found it not an easy thing to do. There was yet much traffic in the streets, but the horses seemed to know that their day's work was nearly done, whilst the drivers, holding the reins in one hand, struck their breasts with the other, or blew the warm breath upon their fingers to produce a passing feeling of warmth, all the time wistfully looking forward to the fireside at home.

The foot passengers on the causeways pushed rapidly on, and all appeared wishful to get out of the streets and under some friendly shelter as soon as possible. There was a strange hush over all which at first one could scarcely account for, but it was caused partly by the snow, which had begun to fall—not heavily, but in sufficient quantity to spread a thin covering of glistening white upon the road—but mainly by the fact that the hurrying people were thinking in their own way, and in accordance with their endlessly varying circumstances, that the old year was now come to its last day, and would soon reach its last hour, and that the next morning would be the first of a new year.

It was upon this afternoon that a girl of about fifteen years, tall and womanly-looking for her age, and wrapt in a warm grey cloak, turned out of one of the main thoroughfares, and picked her way along many smaller streets, quite familiar to her, until she found a row of high old houses, once the residences of merchants and well-to-do people of the town, but long since abandoned by their richer inhabitants and given up to the poorest of the poor.

In every house were at least a dozen rooms, which gave a home to as many different families. In the gathering gloom the girl entered the open door of one of these houses, and ascending a broad, old-fashioned staircase, found her way to a small room on the second floor.

She knocked first, and without waiting for an answer opened the door, and said, as she peeped within—

"Are you there, Mrs. Manley?"

"Why, bless you, my child, to be sure I am here, for am I ever anywhere else? But how is it that you are here on such a day as this?"

"Oh, I've walked quickly, and, thanks to my cloak, I've not felt the cold much. I'm young, you know; you could not have got along at all to-day. But I can scarcely see you; your fire is getting low, and you've not lighted the lamp yet, Mrs. Manley; let me attend to these things for you."

And the visitor put off her cloak and hat, and soon set the lighted lamp in its place, and made the fire to glow with added fuel. And noticing that the cup and saucer upon the table had not yet been used, she said,

"Why, you've not had your tea yet, Mrs. Manley; how you do neglect yourself!"

And, without waiting for a reply, she made some nice toast and prepared a cosy meal. And seating herself at the table, she said,

"Now I'm going to serve you to-day; come and have a cup of tea with me."

And the old woman and the girl sat opposite each other and began their homely meal, while all Mrs. Manley could say at the time was just the short exclamation, "Bless you, my child!"

Soon Ellen Walton, for that was the visitor's name, noticed that the look of sadness which had rested upon the face of her aged friend was driven away, and the more usual expression of peaceful contentment returned.

"You see," said Mrs. Manley, "I had not expected anyone to-day, and as I remembered that New Year's Eve had come again, I could not help thinking of the years gone by. My husband, who died so long ago, has been in my thoughts, and all we went through together, and our children who are in their graves as well. And then you don't wonder, Ellen, that I thought of my one remaining son, who went away to Australia just fifteen years ago, and hasn't come back yet. I've hoped so much that this year might bring me some tidings of him, and happen show me his face again; but the last day has come, and nothing have I heard. Oh, this silence is so hard, so hard to bear! It may seem strange to you to hear me say it, and yet it would be welcome news if I were told for certain that he was dead. For then my mind would be at rest if I knew that he was too. They've all gone before me but this one, and may be he's gone too. I should so like to know! And I was sitting, and feeling all so lonesome and desolate, when I heard your foot upon the stair; and when you came into the room you seemed like an angel sent by God to comfort me, as I am sure you are. Bless you, my child!"

There was a glow of thankfulness in Ellen's heart when she found she had come at such an opportune moment. But she only said,

"Well, I'm a very ordinary sort of angel, Mrs. Manley. I certainly didn't come through the air, for I've no wings, you see; but I'm glad I was able to come upon my feet."

The two enjoyed a little more talk, and then Ellen opened a parcel which she had brought with her, and laid aside as she came in.

"Why, I had nearly forgotten what I came for," said she, laughingly; "I've brought you this for a new year's gift."

And so saying she displayed a warm flannel petticoat.

"I've made this myself, Mrs. Manley, and remember I give you strict orders to begin to wear it to-morrow morning."

The poor woman could hardly find expression for her gratitude. It was not necessary. Ellen quickly put on her things, grasped the hand of her aged friend, wished her a happy new year, and went forth into the darkness, just hearing the words once more as she passed out of the room, "Bless you, my child!"

CHAPTER II.—ALL AT HOME.

ELLEN left a warm and cheerful room; she went out into a storm. It was dark. The snow was now falling much faster, and a strong wind had arisen which came whistling round the corners and careering along the streets, tossing the large snowflakes in a giddy whirl up and down and around, so that for a moment Ellen was disposed to return to the widow's room. But remembering that there would be anxiety about her at home, she set out bravely and fought her way along. The snow came fluttering in her face, and the wind tore at her cloak as though it would fain run away with it and her. Sometimes, also, she stepped into, and almost stuck fast, in a bank of snow which the wind had piled up in its own tricksome way.

But Ellen went panting along until, after turning many corners and passing along many streets, she reached the outskirts of the town, where was her father's house.

Most welcome to Ellen was the sight of the light shining through the red-curtained window as she opened the gate, and then rang the bell of a good modern house, in which she knew she would find a refuge from the storm.

When the door was opened the wind in its strength literally carried Ellen across the threshold into the arms of some half-dozen members of the family who were awaiting her arrival, and then it went scurrying through the house, making the lights to flicker, banging the doors, and almost tearing down a huge mistletoe which hung in its way.

"Why, Ellen, where have you been?" demanded, in a tone of rebuke, her sister Nancy, a girl about two years younger than herself.

"Yes, tell us where you have been," said Richie, a brother, next younger to Nancy.

"Ess, sisser Ellen, tell us way oo ab been," re-echoed Walter, a sturdy little fellow in petticoats, the youngest of all.

"Oh, dear," said Ellen, "if you knew how I had been buffeted with the wind I think you would not at once begin to buffet me with questions."

And catching up Walter, she covered his ruddy face with kisses, and at the same time besprinkled him with melting snow, which was now shaken from its lodging-places in her hair.

Whereupon the little fellow ran to his mamma, exclaiming,

"Ma, ma, sisser Ellen tised me, and dopt some told tears on my face!"

Soon the whole family was seated round the table for a late tea, having been waiting more than half-an-hour for Ellen; and although already Ellen, as we have seen, had refreshed herself at a humbler board, she was not unwilling to join in the meal at home.

It was a happy scene. The room was large and well furnished; a few good pictures adorned the walls; a bright fire burned in the grate. An abundant meal was spread upon the table. The roar of the storm could be heard without, but within was comfort and peace. Moreover, on this New Year's Eve the whole family were present. Not one dead, not one away.

Mr. Walton was a manufacturer who had prospered in his way. A plain, uneducated man, who had known hard work all his life, and delighted in it. One of a numerous class in England at the present day who have partly made, and have partly been made by, the commercial prosperity of the last thirty or forty years, bringing their own practical industry into exercise in times specially favourable for their success.

In his early days Mr. Walton had lived in a cottage, and had worn a blouse and clogs; and among his intimate business friends, men who had prospered along with him, he was still known by the old familiar name of "Billy Walton." And he was not offended when addressed in this homely manner. His humble beginnings he never denied; on the contrary, he sometimes told of them with pride. He had thriven rapidly, but none could deny that he had also thriven honestly.

How much Mrs. Walton had contributed to this success no one could say. Certainly not a little. She had always been a toiler. At one time she worked at the loom, and for a long period after her husband began business on his own account she was his "first hand."

Until recently the Walton family had lived in a smaller house near the mill. A dear old place it was to father and mother, for all the children were born there, and there, too, all the plans which had resulted so well had been first talked over and resolved upon. But their means quite justified them in seeking a better abode. And hence, not without much thought and much talk as to site, and size, and style, the present house had been built. And now, after a few

months' possession, we find them spending their first New Year's Eve beneath its ample roof.

When Ellen went out that afternoon she told no one of her errand except Mrs. Walton. She quite intended being home in time for tea, and was sorry when she found that she had caused a little delay. It was soon found out that she had been to see Mrs. Manley, and Nancy was disposed to complain. That young lady sat next to her father at table, while Ellen was at the other side taking little Walter in charge; and at the same time giving some attention to Joe, an invalid brother of about nine years of age who lay on a couch just by.

Nancy was handsome and spirited; she had heard others say that she was and she believed them. She had also many notions as to what was proper for young ladies to do, and she was very careful to do nothing which she considered unsuitable to her dignity.

"Ma, I think Ellen ought not to have gone out to-day. Hark at the storm!" said Nancy.

"But the storm had not begun when Ellen went," said Mrs. Walton.

"She might have known that it would come, though, for it has threatened all the day. I began to fancy myself in the Arctic regions this afternoon," interposed Harry, the eldest of the family, a fine youth, intended by his father to succeed to the mastership of the mill, but who hated the business utterly, and longed to go abroad.

"Of course, and then to go to that low part of the town. I don't see what reason there is in visiting people of that sort," said Nancy.

"But ought we not to visit the poor?" asked Mrs. Walton.

"Well, yes, it's quite right that they should be attended to, but there are proper persons whose business it is to do that."

Ellen allowed them thus to talk for a moment or two, and then said,

"You are right, Nancy, there are proper persons to visit the poor, and I think all are such who have the time and the means. Even when we have but little of either of these we may find it a very pleasant thing to use what we have. I know that is my own experience."

Ellen had in her mind the widow's blessing.

"Well done, Ellen. I agree with you, my lassie," said Mr. Walton, who had hitherto listened but had not spoken.

"Besides," said Ellen, "Widow Manley is an old friend of ma's. Didn't I once hear you say that she lived near your home when a child, ma?"

"Yes, dear, and I remember so well a kindness she showed to me. I was a very little girl, about Mary's age" (Mary was the youngest child but one in the Walton family, and sat against the tea-tray). "I had got my frock torn in play, and went crying past Mrs. Manley's door, expecting a whipping from my mother at home, when

she called me into the house, mended my tattered garment, wiped my tears away, and said 'There, you're all right again.' Oh, what a relief was that to me!"

"Hurrah for Mrs. Manley!" said Joe, clapping his thin hands as he lay upon the couch.

And little Walter, always ready for a shout, answered vigorously, "Hooyah! Hooyah!" and would have sent his mug of tea over the cloth had not sister Ellen fortunately caught it in time.

"And now, children, it's New Year's Eve," said Mr. Walton. "We've been in our new home all these months and haven't yet given it a name. It seems to be the custom now to give these big houses a name of some sort, and very queer ones some of them have got in this neighbourhood if I may judge. What do you think we should call this house of ours?"

"Oh, father, I've got just the name," said Nancy, eagerly; "I found it in a tale I was reading to-day. Let us call it 'Grosvenor Villa.'"

"I've got a better name than that. I propose that we call the house 'Kangaroo Lodge,'" said Joe, who in his reading that day had been with the hunters in Australia.

"Nay, nay, I can beat them both," said Harry; "let's call it 'The Lion's Den!'"

Nancy's name seemed too fine, Joe's was not appropriate, and as none were willing to be considered as forming part of a collection of wild beasts, Harry's was also at once dismissed.

"Ellen, have you nothing to say?" asked Mr. Walton of his eldest daughter.

"Yes, let us hear Ellen's proposal," said two or three at once.

"Well, I say let us name the house in honour of ma's early days," answered Ellen.

"By all means, if we can," said Joe; "but how can we do that?"

"When ma was telling about her torn frock I remembered that one day she told us some of her early recollections of this neighbourhood. We were outside in the garden, and ma told us of the time when there were no houses about here at all, only nice lanes and fields. And on holidays, sometimes, ma and her companions came and played in the fields about here. Was it not so, ma?"

"Yes, you are right, and I was telling you about the wild flowers—the cowslip, and buttercup, and harebell, and foxglove, and especially one dear little flower, so tender and sweet, so modest and pure, most common, and yet to me most beautiful of all."

"Yes, I know, ma, the daisy," said Ellen.

"I remember, too," said Nancy, "and you told us how you and your companions once were gathering daisies on a hillside, just about where this house stands, and how they made a garland by tying the

daisies in with leaves of oak, and how they placed it on your head because you loved the flowers so much. Was that what you were thinking of, Ellen?"

"That is just the very thing I had in my mind. I thought it so nice to think of ma once a little girl crowned with a wreath of flowers. And how strange that we should come to live just where this occurred. So I propose that we call our home 'Daisy Bank,' in memory of the days when ma, a little girl, tumbled on the grass and gathered the flowers in these very fields."

And so it happened that while the snow fell, and the wind roared, and the old year died away in the midst of winter's desolation, the family within this cheerful home were happy in the thought of the springing flowers and the sunny fields of long years before.

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.



IN all ages of the world's history, in all lands, and by men of all classes, proverbs have been highly prized and usefully employed. They have given point to countless lessons, and force to many arguments. Earl Russell defines a proverb as "the wisdom of many and the wit of one." Tennyson says that they are

"Jewels five words long,
That on the stretched finger, of all time
Sparkle for ever."

Arnot says that proverbs are "like concentrated essences of food." They contain much food in little compass, so that it may keep and carry. They are gold coins, stamped, portable, and recognised currency. Proverbs have "shortness, sense, and salt," or brevity, wisdom, and point.

To just a few of the many pithy and suggestive proverbs used by people in our country and in others, I beg to call the attention of the readers of the JUVENILE INSTRUCTOR. Many of these brief sayings contain little lumps of pure gold, and whoever will carefully attend to them may make himself wealthy with the priceless treasures of wisdom and virtue. These treasures are worth infinitely more than pearls or rubies. "Wise and good is better than rich and great."

I.—WISDOM AND FOLLY.

"Some are wise, and some are otherwise."

Wisdom and folly are often put in striking contrast. "A wise woman buildeth her house, but a foolish woman plucketh it down with her hands." The wise woman gives to her home security,

peace, and joy ; the foolish woman brings into her home gloom, discord, and complaint. She scatters and vexes her husband and children ; the wise woman, by her tact, gentleness, and industry, unites and builds them up into a strong, compact "little sanctuary."

A fool is usually talkative ; he pours forth words, words, words ; "his heart is in his mouth." A fool uttereth all his mind, but a wise man keepeth it until afterward ; "his mouth is in his heart." His words are charged with sense, and virtue, and moral force.

Wisdom is something more and better than knowledge. Knowledge is the mere acquaintance with facts and truths. Wisdom is the right and noble use of those facts and truths. Cowper very clearly shows the distinction between the two :—

" Knowledge and Wisdom, far from being one,
Have oftentimes no connection. *Knowledge* dwells
In heads replete with thoughts of other men ;
Wisdom, in minds attentive to their own.
Knowledge, a rude unprofitable mass,
The mere materials with which Wisdom builds,
Till smoothed, and squared, and fitted to its place,
Does but encumber whom it seems to enrich.
Knowledge is proud that it has learned so much ;
Wisdom is humble that it knows no more."

Many men who have acquired vast learning have, in practical and really important matters, shown themselves to be consummate fools. They had all kinds of sense except common sense and good sense. That is a notable proverb which says, "Heaven and earth strive in vain with a fool." Argument, appeal, and warning all fall upon him in vain. Divine authority and love, human sympathy and reason, fail to move him. As Solomon says in his proverb, "Though thou shouldst bray a fool in a mortar, among wheat, with a pestle, yet thou not his foolishness depart from him." Blows hard enough to crack his skull may be struck, but there goes little light in and there comes little sense out. "A word to the wise is sufficient," but a hundred words to the fool are all too few. "Experience is the teacher of fools, and he is a great one who will not learn from this teacher." If her lessons are not heeded, tribulation and anguish will surely come. Wisdom is something more and better than mere prudence. We often meet with men who are very cautious and wily ; they can scheme and contrive ; but the noble quality of wisdom has little force over their lives. Sir R. Walpole was in many respects a prudent statesman, but he was far from being a wise one. We have in England to-day statesmen who have often been branded as imprudent—for example, Bright and Gladstone—but they have given abundant evidence of their wisdom. They have displayed a clearer vision, a wider charity, a loftier faith in God and in the principles of justice, and mercy, and truth, than all the tribe of trimmers and time-servers put together. Two things are very conspicuous in folly. One is the tardiness with which it receives precious blessings, and the

other the ease with which it parts with them. "Fortune knocks in vain at the door of the fool; he will not rise to let her in." Fortune may come like a rich and bountiful goddess, her lips dropping sweet-smelling myrrh, her eyes beaming with celestial radiance, her hands laden with treasures, her heart yearning with tenderness, but the fool will not let her in. What splendid chances many young men and women, boys and girls, have now! But how many myriads in England are neglecting these golden opportunities of being noble, brave, and useful! Even while the heavens are pouring down blessings more precious than gold, they will not hold out the skirts of their mantle to catch them; or if these blessings are *thrust* upon these people how soon they part with them! "A fool's bolt is soon shot." "A fool and his money are soon parted." The energy is soon spent, the talent soon lost. Wisdom holds fast instructions—"Buys the truth, and sells it not." We are not left entirely in the dark as to how the fool is to be treated. Solomon—who had himself climbed to lofty heights of wisdom, and stooped to shameful depths of folly, who says of himself, "I gave my heart to know wisdom and folly"—tells us how to treat the fool: "A whip for the horse, a bridle for the ass, and a rod for the fool's back." The fool may not like the rod, any more than the horse likes the whip, still we must lay on though the fool may wince and kick. But to what fool do I refer? Why, to the fool that gets into our own brain, and soul, and life. Who amongst us has not at times stood quite still, and said, "What a fool I was on that occasion! What foolish words, thoughts, and deeds were mine!" We should not like to have heard another voice say so, but our own voice said it—yes, our conscience persistently, fearlessly, repeatedly said, "Thou fool!" Well, we are to lay the rod of correction upon our own back and heart honestly and lustily. The proverb says that "Some are wise, some are otherwise." The number of people who are otherwise is alarmingly great. Carlyle, in estimating the population of England, is very severe; he says "that the population of England is about 30,000,000, mostly fools." That is scathing, but it is not much harder than two proverbs I have met with:—"If all fools wore white caps, we should look like a flock of geese." "If folly were a pain, there would be some crying in the world." Wisdom has been well defined as "the choice of the noblest ends, and the adoption of the fittest means to secure those ends." What are the noblest ends? 1. The culture of our minds, filling them with light, storing them with solid and sublime truth; this may be done by reading, observation, and reflection. 2. The culture of our hearts, making them pure, generous, and brave; this may be done by prayer, reading the Bible, and fellowship with those who are wise and holy. 3. Doing good, promoting the happiness and progress of others by our sympathy and toil. 4. Pleasing God by our obedience and trust, our reverence and love. "The fear of the Lord, that is the beginning of wisdom." "How much better is it to get wisdom than gold!"

“Wisdom Divine! Who tells the price
Of Wisdom's costly merchandise?
Wisdom to silver we prefer,
And gold is dross compared to her;
To purest joy she all invites,
Chaste, holy, spiritual delights;
Her ways are ways of pleasantness,
And all her flowery paths are peace.”

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.
JANUARY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
6 A New Year's Song	Psaln xxxiv.	ver. 10.
13 The Light of the World..	John i. 1—14	viii. 12.
20 John's Witness to Jesus..	John i. 19—34.....	ver. 29.
27 Christ's First Disciples....	John i. 35—51.....	ver. 47.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
6 Rehoboam, 1st King of Judah	2 Chron. xii....	Jas. iv. 10.
13 Asa's Faithfulness	2 Chron. xiv.	ver. 11.
20 The Covenant renewed ...	2 Chron. xv. 1—15	ver. 2.
27 Jehoshaphat's Prosperity.	2 Chron. xvii. 1—13	Ps. lxxxix. 15.

FEBRUARY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
8 Christ's First Miracle ...	John ii. 1—12 ...	ver. 11.
10 The Temple cleansed.....	John ii. 13—25 ...	ver. 16.
17 Nicodemus taught	John iii. 1—17.....	ver. 7.
24 The Woman of Samaria...	John iv. 1—15.....	ver. 14.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
3 Jehoshaphat reproved ...	2 Chron. xix.	Prov. xv. 32.
10 Jehoshaphat helped of God	2 Chron. xx. 1-4, 14-25	ver. 20.
17 Joash repairing the Temple	2 Chron. xxiv. 1-22	Ps. xxvi. 8.
24 Uzziah's Pride punished..	2 Chron. xxvi. 1-10, 16-23	Prov. xvi. 18.

BIBLE QUESTIONS.

WE present the following Scriptural Enigma for our young friends to be employed with this month. In our February number we shall announce the prize winners for last year, and also have something particular to say about the Bible Questions for this year.

1. A little plant that "springs out of the wall;"
 2. A man who "oft refreshed" the Apostle Paul.
 3. The mountain-top where Moses breathed his last;
 4. A river into which a book was cast.
 5. Where Ahaziah, king of Judah, died:
 6. One who was stricken dead because he lied.
 7. What Peter says we should to virtue add;
 8. The place where Solomon a navy had.
 9. A mighty king to whom Ahaz sent gold;
 10. That which, if seen, is not itself, we're told.
 11. One to whom Paul a salutation sent;
 12. A woman who partway to Bethlehem went.
 13. The place where Paul by friends from Rome was met;
 14. A rock on which the ark of God was set.
 15. To what are Christians by God's power kept?
 16. Who turned his face unto the wall and wept?
 17. Who forty sons and thirty nephews had?
 18. One of the daughters of Zelophehad.
 19. A prophet who is also called a priest;
 20. He who of Jesse's sons was thought the least.
- You'll find the words that these initials form
In Paul's epistle to the church at Rome.

BERRY BROW, HUDDERSFIELD.—We held our annual juvenile missionary meeting on Sunday afternoon, May 20th, 1877, in our chapel. There was a very fair attendance of parents and friends. The chair was occupied by Mr. H. Berry, who opened the meeting in a very appropriate address. After the report read by the secretary, addresses were delivered by the Rev. Law Stoney, Messrs. J. Heeley and S. Snider, teachers in our school. The following scholars also recited pieces on the occasion:—Ann Banks, poetry on "Missions;" Harriet B. Dawson, "Juvenile Zeal;" Nanny Barrand, "Improve your Talents;" Helena Jessop, "Prayer for Missionaries;" Elizabeth Bailiff, "The Good Samaritan;" Janet Woodhouse, "Open the Door;" Sarah Ellen Bradley, "What am I?" Sarah Alice Crow, "Address on Missions." The collection at the close amounted to £1 2s. 2d.; collected by Sarah Ellen Bradley, 3s. 1d.; total, £1 5s. 3d. This is rather below the amount of last year, but we are determined that the amount shall be much more next year.—H. GLEDHILL, Mission Secretary.

UNETT STREET SUNDAY SCHOOL, BIRMINGHAM.—Competitive Examination.—We have held for the last three years in connection with our

Sunday schools a competitive examination. This year the examination was based upon the third quarter's afternoon lessons as published by the Sunday School Union. It was divided into three sections, viz., written papers in two divisions, and an oral examination of the lower classes by the superintendents. Prizes were likewise given to several scholars for punctual attendance and good conduct. On Sunday afternoon, November 18th, the prizes, fifty-four in number, were presented to the successful candidates in the presence of their parents and friends, by Mr. Thomas Christie, one of our esteemed superintendents, who in suitable terms congratulated them on their success, and expressed a hope that the books presented might prove a lasting blessing to them. The meeting was presided over by our esteemed senior superintendent, Mr. Henry Allen. Interesting and instructive addresses were delivered by Mr. Charles Clarke, another of our esteemed superintendents, and by our much respected young minister, the Rev. F. H. Robinson. Among the prizes received by the elder scholars were books calculated to prove of great value to them as teachers, such as "Eadie's Encyclopædia," "Companion to the Bible," "The Apostle to the Gentiles," &c.—J. M. K., Secretary.

MOUNT ZION, TARTOWN, PUDSEY.—We held our juvenile missionary meeting on Sunday afternoon, October 21st, in the schoolroom, and though the weather was very unfavourable, we had a good and respectable congregation. The chair was taken by Brother Hartley Hinchliffe, one of our school superintendents, and addresses were delivered by Messrs. John Boyes, John Hinchliffe, John Nicholson, Wm. Henry Porter, and our esteemed minister, the Rev. Thomas Stoneley. The addresses were very appropriate for the occasion, and were listened to with marked attention. Altogether we had a very good meeting, made the more attractive by the part our young friends took in singing and reciting their pieces and dialogues. The following is the result of our efforts during the year:—Mary Fearnley, £1 2s.; Hannah Mary Glover, £1 0s. 6d.; Wm. Raistrick, £1; Sarah Ann Shoesmith, 15s.; Mercy Rayner, 4s. 6d.; Clara Clarkson, 9s.; Sarah Elizabeth Lumy, 8s. 1d.; Mary Hannah Hinchliffe, 7s. 6½d.; Sarah Elizabeth Boyes, 7s. 2½d.; Eva Cromack, 6s. 8d.; Sarah Walker, 6s.; Martha Pearson, 5s. 9½d.; Annie Lumby, 5s. 8d.; Ann Clarkson, 5s. 4d.; Mary Ann Foster, 4s. 1d.; Martha Elizabeth Hinchliffe, 4s.; Margaret Smith, 3s. 3d.; Eliza Townend, 1s. 10d.; Emma Hinchliffe, 1s. 6d.; Sam Whiteley, 1s. 5d.; John Gaunt, 1s.; Harry Suttcliffe, 7d.; public collection, £1 7s. 1½d.; total, £9 17s. 8d. We cannot conclude this report without mentioning the death of one of our young but earnest collectors. The writer of this has seen his eyes sparkle with pleasure when he has been successful with his card or box. But the race of our young friend, John Margisson Stott, is ended.

Alas! he's gone in nature's prime,
He's withered like a rose
That's cropped before it scarce had time
Its beauties to disclose.

We cannot tell who next may fall
Beneath the chastening rod;
One must be first, but let us all
Prepare to meet our God.

—JOSHUA SHOESMITH, Secretary.

Poetry.

THE MASTER'S CALL.

John xi., 28.

"THE Master is come, and calleth for thee ! "
 To Mary the message was spoken,
 As quiet and still in her house she sat,
 For her heart was well-nigh broken.

Her much-loved brother was cold in death ;
 Four days he had lain in his grave,
 And Jesus her Lord was absent yet ;
 Oh ! had He but been there to save !

But Martha to her Christ's message now brings ;
 And quickly she flies to His side,
 Falls down at His feet, " Lord, hadst Thou been here,
 My brother had surely not died."

But Christ is almighty, and e'en from the dead
 Had power to rescue and save ;
 To the sorrowing sisters their brother restore,
 And call Lazarus back from the grave.

" The Master is come, and calleth for thee ! "
 The message is now brought to all :
 He comes to give life, and pardon, and peace ;
 To rescue from sin and from thrall.

" The Master is come, and calleth for thee ! "
 Oh ! art thou a sinner ? then go ;
 " Though your sins be as scarlet," He saith,
 " I will make them as white as the snow."

" The Master is come, and calleth for thee ! "
 Thou weary and sorely distrest :
 " Take my yoke," He says, " and learn of Me,
 And then will I give to you rest."

The Master is come, He calleth for all—
 Oh ! do not let any say nay ;
 Let the little ones come, and those who have borne
 The burden and heat of the day.

He is calling, oh, come, and make no delay ;
 For now is the season of grace,
 Ere in judgment He says, to the righteous, " Come,"
 To the sinners, " Depart from My face."

Behold ! He comes quickly to bring His reward ;
 As He went to prepare us a home :
 May we, trusting in Him, now joyfully say,
 " Even so, Lord Jesus, come."

MILLIE.



SNOWDROPS.

SNOWDROPS.



THE Snowdrop is a flower which all persons, whether old or young, are fond of. Its name indicates its whiteness, and is also applicable to the time of its appearance, often when snow is on the ground. One of the greatest charms of the Snowdrop arises from it coming in a wintry season, when few other flowers visit us. Hence very tender and consolatory sentiments are associated with it. We look upon the Snowdrop as a friend in adversity; sure to appear when most needed. The sight of this "lone flower, hemmed in with snows, and white as they," also suggests to us thoughts which bring to us comfort and hope when wintry winds have blighted the flowers which once gave cheerfulness to our life. The following lines are very beautiful; the sorrow referred to being the loss of a lovely babe.

"In the presence of your woe,"
Writes my friend to me to-day,
"I am dumb; for well I know
Words are worse than empty; so
I have not a word to say.

"But in proof of sympathy,
Take these snowdrops that I send;
Let their tender beauty be
Mutely eloquent for me
Dear and sorrow-stricken friend."

Sometimes, just to have one's mood
Comprehended is relief;
Simply to be understood
In one's sorrows is a good
That avails to soften grief.

And of all the words well-meant
To console my aching heart,
Though so many have been sent
With no lack of kind intent—
These alone have soothed the smart—

These whose meaning is expressed
In a handful of white flowers.
—Ah, for one that used to rest
On a happy mother's breast
In the happy, vanished hours!

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of "A Year at School," &c., &c.*

Letter No. 80.

From BEN BARLOW to TED INSTONE.

High Street, Woodbourne,
Jan. 22nd, 187—.

MY DEAR TED,—

Isn't it vexing? This is the first day the ice has been fit to bear, and it is my last week-day here. However, I'm going to get all the fun I can this afternoon, and shall bring my skates to school for further sport there. Don't forget yours.

This is one of Charlie Thornton's half-holidays, and I expect he will be at home when I go to post this. If he is, we shall go and look up Tom Blunt and the other fellows, and have a regular good game at "bandy." So you must excuse any more now from, yours affectionately,
BEN BARLOW.

Letter No. 81.

From TED INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park,
London, Jan. 22nd, 187—.

MY DEAR BEN,—

In less than forty-eight hours I suppose we shall be roaming about the familiar old place, counting up those who left last half, and examining and cross-examining the new comers.

Well, I shan't be very sorry to be at school again, especially as the weather yesterday and to-day gives promise of skating. I haven't been into the park myself, but I am told the ice is almost strong enough to bear.

I will shut up now. I am going to spend the last afternoon with my chemicals. It will be six months before I can amuse myself with them again. Mary is out for holiday to-day, and Jane (the housemaid) has consented to my bringing my box into the kitchen, on condition that I won't set anything on fire. I am half inclined to make a few detonating powders to bring to school. There is one mixture that is perfectly harmless, though it makes a frightful noise.

Don't forget to bring the "Swiss Family Robinson" with you. You have excited my curiosity by your evident interest in it.

Ernie and all at home join me in kind regards to yourself and all your family. I am, until Monday, yours absently, TED INSTONE.

Letter No. 82.

From BEN BARLOW to MRS. BARLOW.

Waterside House, Worcester,

January 24th, 187—.

MY DEAR MOTHER,—

You will see by this that I reached here safely. I found Dr. Tasker, Ted Instone, and all my particular friends very well. Of course we were all glad to meet again, and had much to tell about our doings in the holidays.

We are having splendid weather. Before I had been at school an hour we were skating on the shallows of the river. It was glorious—perfectly safe too.

The rest of the fellows are gossiping round the tea-room fire, and I want to rejoin them. I just slipped out to write this, knowing what a dear anxious mamma you are.

With love to father, Clara, and Helen, and kind regards to trusty Bob, I remain, your loving son,

BEN.

Letter No. 83.

From BEN BARLOW to TOM BLUNT.

Waterside House, Worcester,

January 31st, 187—.

DEAR BLUNT,—

I promised to write to you the first opportunity I had. Well, what with skating and aliding (hasn't it been delightful weather!), lessons to learn, and old schoolfellows to gossip with, I haven't been able to do it before.

Of course the old place is much the same as it was, but several of the big boys have left, and we have quite a batch of fresh youngsters. There is one new boy about the same age as myself, and he is the most conceited young prig you ever saw. He is the *youngest* son of a *younger* brother to a baronet, and doesn't he plume himself on his connection with a title! I guess we shall take a bit of the pride out of him before he goes home again.

He is a regular dunce too. One of the little boys asked him how it was he had never learned vulgar fractions. He said he hadn't got to get his living by his brains, for his father would leave him well provided for, and there was just a chance he might inherit his uncle's title! Just fancy that, and his uncle has three healthy sons of his own, to say nothing of our dunce's two elder brothers, who all have to be shuffled out of the way before he can get the title! Ted Instone says he is literally "presumptive heir" to the baronetcy, for it is a piece of the most astounding presumption to *dream* of getting it, let alone to *speak* of it. Ted is determined to humble this young aristocrat, and of course I have no objection. He has played him a few pranks already.

I suppose you have had rare times on the mill-pond this week. So have we here. I hope the ice will last a few days longer, but if it doesn't we can't complain. A whole week's skating is something to be thankful for nowadays. According to old people's talk, there used to be a lot more ice and snow fifty years ago. I wonder how it is the winters have altered. Give my kind regards to all friends, and believe me, yours truly,

BEN BARLOW.

Letter No. 84.

FROM BEN BARLOW TO CHARLIE THORNTON.

Waterside House, Worcester,

Feb. 4th, 187—.

MY DEAR CHARLIE,—

I write this to-day in order that, to-morrow being Saturday, your half-holiday may give you leisure to reply. I can tell you I miss your letters very much.

This is the second week of my return to school, and we have now settled down to our usual lessons. The first week generally passes in confusion, for boys are arriving almost every day. Last week, too, we were out skating every minute we could spare, so it hardly seemed like being at school. Now that the weather has changed to wet, we spend our leisure in the schoolroom and classrooms as usual, and do our lessons steadily and quietly.

But I must tell you of a new boy we have here. His name is Alfred Bowles. He is nephew of Sir Arohibald Bowles, Baronet. So in fun we have dubbed him "the Honourable Mr. Bowles," and I believe he liked it at first, though now he sees we are all laughing at him, it annoys him, and if any of the small fry call him by the title he boxes their ears.

He has never been to a public school before. He has had tutors at home, but they must have let him do just what he liked, for he can scarcely read, and couldn't do a sum in arithmetic beyond the simple rules if it would ensure him his uncle's title, and I am sure he'd try hard for that. But though he is such a dunce he gives himself airs, and would like us to bend and bow to him merely because he comes of an aristocratic family.

Of course we played him pranks the first night or two. We forced him to take a cold bath without troubling him to undress. We hid his boots, and put the fire-irons in his bed. Almost every boy is served the same, and if he had good sense enough to stand these jokes, we should soon have dropped them. Instead of that, however, he reported every little thing to the master, and threatened us he should write home if anything of the sort happened again.

This was something new for us, so almost every night the Honourable Mr. Bowles finds his rest disturbed by something or other, and what plagues him is that he can't find out who is the author of the

mischievous. Ted Instone is at the bottom of most of it, but as nobody likes Bowles he can't get anyone to peach.

But the best fun was in broad daylight. It was the first day of the thaw. I must tell you this new boy is as big a duffer in the playground as he is in school. He owns he can neither skate, slide, swim, nor play at cricket. Ted laughingly told him he was amazed he could not play at cricket, for any member of the Bowles family ought to be able to *bowle* if he couldn't bat. Well, as I was going to tell you, he happened to venture on the ice just as it began to thaw. You know how thawing ice sometimes bends and waves. Well, a lot of us got held of him, and began to run with him and jump round him.

You would have laughed to have seen him. He trembled as if he were awfully shivery, though he was really sweating with fear, and begged us to let him go. If it had been a deep pond he might have been frightened, but where we were the water wasn't two feet deep, and if we had broken through he would only have got a wetting. We almost got tears in the big baby's eyes before we allowed him to get off, and then he went straight and told the Doctor, who gave us all a lecture—one to him for being foolishly afraid, and a sharper one to us for trying to tease him.

But here is Ted Instone wanting to know how many more chapters I am going to write in my "epistle to the Woodbournians." He wants me to join him in reading my "Swiss Family Robinson." We read aloud in turns. Two or three times we have read it after we have been in bed. You know we have a room to our two selves, so we have only to buy candles, and we can read as long as we like—that is, if we can keep the masters from knowing of it.

With kind regards, in which Ted joins, I remain, yours truly,
BEN BARLOW.

Letter No. 85.

FROM TOM BLUNT TO BEN BARLOW.

Old Mill, Woodbourne,

Feb. 10th, 187—.

MY DEAR BEN,—

Thanks for your letter. As you expected, we had jolly times on the ice while it lasted. I was on before breakfast every day, and for three nights a lot of us skated by moonlight. As to the winters that used to be years ago, don't you think old people get their memories of one year mixed up with another, and so exaggerate their severity without intending it?

I was much amused to hear of the young aristocrat that Instone and you have taken in hand. I should think it is a good thing for him that he isn't likely to have to get his living by his brains. If he had it would be a poor living he'd get, I should think. I shall be

glad to hear how you get on in your attempts to educate the baronet's nephew. I think I could perhaps assist you if I were there.

I was up at your house last night with my drum, and Bob and I learned a new march tune. We were playing in public again last week. It was at a Band of Hope meeting held in our schoolroom—the Methodist school, you know. I am a member of the Band of Hope, and though all the players are not teetotallers, I got Mr. Jones to consent to our playing on the occasion. The entertainment passed off very well.

Give my kind regards to Instone, and believe me, yours truly,

TOM BLUNT.

P.S.—I had actually finished and folded my letter without mentioning the very thing I intended most particularly to write about. It is our Annual Missionary Meeting early next month, and of course I shall want to get as large an amount for it as possible. So I am going to sell off more than half of my missionary rabbits during the next fortnight. I have advertised them. If you want any, just let me know, and Bob shall have the best at a fair price.

THE PRISONER'S CHILDREN.

By MRS. MELDRUM, Author of "NED'S SEARCH."

CHAPTER II.—FRIENDS FOR THE FRIENDLESS.

" H, mother, mother, it has been such a splendid day!" exclaimed Bernard Kelly, throwing the house-door suddenly open. "I wonder all the lads don't join our band."

"I wish they would, Bernie. Then you've enjoyed yourself, have you?"

"Famously, mother, never enjoyed anything so much before. The music was first-rate, Captain Whittal said so; he made a speech in front of the house, said we were all welcome, and he hoped we'd make the most of it, and all that, and we did it too."

"Where's father? Didn't he come to you?"

"Yes, after tea; he's gone somewhere—he said he shouldn't belong. He wanted to hear about one of the workmen that got hurt this morning; another man knocked him down and nearly killed him."

"Poor fellow!" sighed Mrs. Kelly, compassionately. "How did it happen, Bernie?"

"Don't know; we were busy talking about the do at the Hall all the way home. Oh, here's father now!"

Mr. Kelly entered as he spoke, hung up his hat, and seated himself at the neatly-spread supper-table.

"That's right, John, supper's waiting," and Mrs. Kelly placed a dish of hot potatoes before her husband, who rose and asked the usual blessing.

"Truly thankful, eh, wife, and so we ought to be, and look at some poor things to-night suffering both in mind and body."

"Who was it, John?" asked his wife knowing that his thoughts were dwelling on the scene he had just left.

"Martin Brown, a man with four little children and a sickly wife. There she is, can't do a hand's turn for herself, and her husband taken to the infirmary, no one knowing if he'll ever come out again."

"Dear me, dear me, poor thing!" ejaculated Mrs. Kelly, arresting a potato on its way to her mouth. "What will she do?"

"There's nothing for it but the workhouse; they're going straight away, but it made me sorry, I can tell you, wife, to think of it; suppose it had been you and our little ones when we had them!"

Here John stopped abruptly, for his wife was wiping her eyes on her apron at the remembrance of the time when Bernard, now the only child, was one of five, each one precious to its parents' hearts.

"Was he a good man, father?" asked Bernard.

"Brown? Yes, as good a husband and a father as needs be, only for drinking now and then a bit too hard; and a nice family, too, he had, always tidy, poor as they were. I've seen the little things, two of 'em come with his dinners, and he'd pat their heads and give them the nicest bits he'd got."

"And the other man, John?" questioned Mrs. Kelly. "What made him fight?"

"That's more than I can tell; it was Tomlins, a big, strong fellow, good-natured enough when he's sober, but a regular wild beast when he's had too much."

"Was it drink again then?" exclaimed Bernard, impetuously. "Father, why do they let people take it? They won't let them take poison, and it's just as bad! It ought to be against the law; what use is it having laws if they can't prevent such wicked things happening?"

"You see, Bernie boy, those who make the laws don't see the mischief like we do that's down right amongst it. They say it's a good thing if people use it properly, and they won't deny the people the chance of using it properly, even if some abuse it."

"But, father," said the boy, thoughtfully, "if I could take something without it doing me any harm, but I knew *you* couldn't, and that if I had it you would have it too, I shouldn't touch it myself, however I liked it."

"That's the right spirit, my boy, and it's what people will have to come to before this drink question is settled. It's the spirit good old Paul came to when he said, 'It is good neither to eat flesh, nor to drink wine, nor anything whereby thy brother stumbleth, or is offended, or is made weak.'"

"Did they take Tomlins up, John?"

"Yes, he never tried to get off; he sobered down in a minute when he saw Brown lying at his feet like dead. I felt near as sorry for one as the other. I believe, now I come to think, it began with

Brown telling Tomlins he was a selfish fellow to drink his money away instead of taking it home to his children ; seems he's got two. One came up directly after with his dinner, and a fine stir she made, running along of the policemen, crying for them to let her father go. But he knew it was no use, and he told her he shouldn't be home this long time, and then I heard him say, ' Do your best, Lu, and take care of poor little Willie.' And the girl said she would, but I don't know how she'll scheme it "

Mrs. Kelly looked up as her husband mentioned the children's names. " Where did Tomlins live ? "

" I don't know. I must ask to-morrow, for they'll want someone to look to them a bit, and I can do something, if it won't be much. "

" You won't have to go far to find them, I think ; if I'm not mistaken, they live in the cellar underneath us, and Willie is a sad little cripple. " And Mrs. Kelly told how the children had come up to watch the procession that noontime. " I nearly missed seeing our Bernard with listening to their talk ; but I did see you, Bernie, didn't I ? Why, bless the boy, he's asleep ; I daresay he's tired out. Pleasure-taking's often the hardest kind of work. "

" I'm not asleep, mother, " said Bernard, raising his curly head from the table. " I was only thinking what I'll do when I'm a man to make people stop drinking. "

" Better think what you can do while you're a boy, or you'll have a good while to wait before you begin. You can do something right away if you try. "

" What can I do ? " asked the boy, his bright eye glistening. " Tell me, father, and I'll do it. Captain Whittal said we could all do something, but he didn't tell us what. "

" No, he left you to find that out, and so shall I ; but remember this, Bernie, nobody ever laid themselves out to watch for some good work to do but they found it ; so mind you keep a sharp look-out. "

Long after Bernard had fallen asleep, his father and mother sat together talking of their son and of those less favoured little ones in the cellar underneath.

Little did Lucy guess, as she lay with her arms clasping the little brother who was all that remained to her, and sleeplessly pondering ways and means of existence, that just above unknown friends were weighing the same considerations.

The shop evidently was not much to be depended upon ; a casual glance had been sufficient to decide that. Then Lucy could not be expected to earn support for two, and also take care of Willie.

" He could come in here if she had anything to do regular, and I'd look to him while she was out, " said Mrs. Kelly.

" Don't fasten yourself too much, wife ; you know I want to do what we can for them ; but let's be cool about it, and fix on the best way before we start, so that we'll not have to draw back. "

" Well, John, how would it be if the little boy—he's eight or nine for all he's so small and has to be carried—if he could go to school

along with our Bernard, for a few weeks at any rate? We could pay his school-wage, and he'd be off the girl's mind."

"'Twould be a good plan enough, wife, if he was like other boys; but from the way you tell me he is, I'm afraid he'd be teased among them, and perhaps—I don't know, only it's possible—our Bernard might feel a bit ashamed of going along with him."

"I should be ashamed of *him* if he was, and so would you, John," responded Bernard's mother, warmly. "I don't know a handsomer lad than our Bernard anywhere, but I'd rather see him as plain as a pikestaff or as crippled as Willie Tomlins than I'd see him despise the little fellow for what's no blame to him, poor child."

"Gently, gently, wife; a boy may have a good heart and yet fear being laughed at. But I don't think in the end but what he'd come out right. We'll put it to him in the morning."

"Perhaps it would be better not to speak to him about it just yet. You see, to-morrow's Sunday, and I don't think those poor things are fit for going to Sunday-school. I'll ask ask them in a bit and see what I can make of them. The girl seemed rather quiet—I was going to say of a sulky sort, but I won't say that. But anyway I'll step down and see them in the morning."

"All right, you'll manage it best," and John Kelly smiled at his wife as he opened the Bible for their evening reading.

And if earnest, loving supplications went up to heaven that night for the son so well-beloved, supplications also tender and fervent were offered on behalf of the desolate children in their lowly room, that now they were forsaken as it were by father and mother the Lord would take them in His own especial care.

And while the objects of these requests slept on unconsciously, their Heavenly Father, with His ever-watchful eye and His ever open ear, saw and heard, and in His own good time would answer.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXIV.—SPIDERS.



AMONGST the commonest and best known insects are spiders, which, though generally beheld with aversion, are really wonderful creatures, and well repay thoughtful attention. There are numerous varieties of them, as for example the common house spider; the garden spider; the black spider that makes its house in dark and subterranean places; the wandering spider, who is the vagabond of the tribe and has no settled abode; and the field spider, commonly called the "daddy long-legs." The structure of this last is a remarkable example of the marvellous adaptations with which Nature

abounds. It lives among the grass, and, unlike other spiders, does not spin a web. The blades of grass would not only hide its prey from its eyes, but would also effectually stop its progress, had it not these extended legs as stilts to elevate it; and kind Nature has accordingly endowed it with powers exactly adapted to its mode of life. In another line it is the same kind of adaptation as is seen in those long-legged birds called waders, that seek their prey in marshy places and on the banks of rivers.

Every spider has two parts, joined together by a slender thread. The fore part, which contains the head and breast and feet, is covered with a kind of scaly armour. The after part, which is covered with a very soft skin, is clothed with hair. They are very well provided with organs of vision, and ought to be able to see a deal of the world, as most of them are furnished with eight eyes, occupying different positions in the various species. The reason their eyes are thus numerous is because they are fixed, unlike the eyes of other creatures that can either be turned at will or are so projected as to see on all sides at the same time. If these creatures could speak I daresay they would tell us that they had not an eye too many, for they have numerous enemies, and, to avoid their attacks, as well as to earn their own living, it is necessary for them to keep a sharp look-out. From their heads project a couple of saw-like arms, which end in a nail or claw. They have eight legs, jointed like the legs of a crab, and ending in claws. It is by these claws that they fasten themselves to their threads, or fix themselves on any surface they choose. So fine are these instruments that the most perfectly polished surfaces offer inequalities sufficient for them to hold on by. At the extremity of their bodies they have orifices, which they can open and shut at will, and from which they discharge the matter whereby they construct their webs. These webs are so constructed as to form a house for themselves and a snare for their prey. Light and fragile as they are, they are strong enough for the purpose. It is one of the marks of divine wisdom that greater strength is never used throughout Nature than the circumstances require. We should laugh at a man who would never be content with less power than a fifty-ton hammer to crack a nut; and we should be compelled to smile at the blunders of Nature if a net of hemp cordage were substituted for the frail spider's web. The delicate web is so beautifully constructed that the finest silk lace ever made looks botched and tangled by its side.

In constructing its web the spider prudently leaves outlets for its escape, if it should be attacked by a greater power than it can resist. It also makes for itself a little hut, where it can hide unseen. Every one must have noticed that in the web there are lines which cross the circular ones, and all converge to the centre like the spokes of a carriage wheel. The insect takes its position in the centre, and, besides having eyes which can look all round at the same time, knows from the very vibration of the threads when a fly is caught in its meshes. It is to this fact that Pope alludes:—

“The spider's touch, how exquisitely fine !
Feels at each thread, and lives along the line.”

The industry of the spider is commendable in building the web; in repairing it when a breach has been made in it; in keeping the steady watch it maintains, always having an eye to business; and, not least, in keeping its web tidy and clean. Some people who allow their houses or shops to be neglected and dirty would do well to take a lesson from the spider. Any dust that may get scattered on its web it carefully and scrupulously clears away; and, by its watchful attitude and well-arranged web, seems always to be saying that it is ready for the next customer.

To preserve their eggs they spin a web much stronger than that with which they entangle their prey; and naturalists are all agreed that in manufacturing this web they use their best materials, and take at one and the same time most pains and most pleasure. They have in an inferior degree the satisfaction which a fond mother realises as she busily plies her needle over some pretty dress to grace her smiling baby. The web containing the eggs is fastened in some convenient place, and the spider never leaves its neighbourhood until the young ones have come forth. Affection and solicitude for their offspring are common to all the creatures God has made, from man down to the tiniest insects that creep. Does not this remind us of that great love that God Himself has for our immortal spirits, created in His own nature and likeness?

Industry and perseverance are strongly enforced by a study of the habits of the spider, and these are lessons of such importance that we should be thankful to learn them from any creature however humble. It was by observing the efforts of a spider, repeated over and over again until they were successful, that the energies of Robert Bruce were rallied, and he rose from the lowest depths of despair to that indomitable perseverance which was ultimately victorious. The Bible itself derives a moral from the spider that taketh hold with its hands and is in king's palaces; and all history confirms the truth that a man diligent in business shall stand before kings and not before mean men. It is true that the spider has been commonly regarded with strong dislike. The poet Thomson speaks of them as

“Cunning and fierce—
Mixture abhorred.”

This dislike probably arises from the fact that they have the unfortunate habit of eating each other. But were it not for this, from the immense quantity of eggs that they lay, our dwellings would be filled with them, and we should have a plague as dreadful as the plagues of Egypt. Spiders are undoubtedly serviceable to us in a high degree in checking the numbers of other insects, and it is their mutual animosity that prevents their own undue increase. In their structure and their habits they are an astonishing display of the Supreme intelligence; and if we cannot copy them in any other respect, their patient industry and unflagging perseverance will always be worthy of our imitation.

DAISY BANK; OR, SISTER ELLEN'S MINISTRY.

By J. CAPES STORY.

CHAPTER III.—MINNIE MAYLOW'S WELCOME.



THE old year went and the new year came. People did not become accustomed to it at once, sometimes they forgot that it had come, and thought the old one was yet present, and in writing the date they omitted to add the new unit to the sum of the bygone years. But little by little the face of the stranger grew into a familiar one, until at length all its strangeness was gone, and people began to say how much the features of the new resembled those of the old.

On one of the days of this opening year, when winter was gathering up its folds of ice and snow with which it had wrapped the earth so long, and when the sun was sending his warm rays down among the roots of the grass and flowers, waking them up and telling them it was time to spring and bloom again, the mason came with his sharp chisel and cut into the stone gate-posts of Ellen Walton's home the letters which spell "Daisy Bank." And so the suggestion made by Ellen on New Year's Eve, and the resolve to which the company came, was executed.

About this time also there called at Daisy Bank one day a lady and her daughter. The lady, who was tall and stately in her walk, was Mrs. Maylow, the wife of a well-known gentleman of good standing in the town, another prosperous manufacturer, who possessed a fine house in the neighbourhood. The daughter was Minnie Maylow, also tall, fair, and of a beautiful countenance.

It happened that on this fine day in early spring the young people were mostly in the garden enjoying the soft air and the cheerful sunshine.

Walter and Mary were seated in a four-wheeled truck, which was called the chariot, a vehicle just large enough to hold them; Richie, like a horse, was yoked to the chariot, and had a string in his mouth for a bridle; Walter was the driver and flourished a whip.

Harry, who ought to have been at the mill, was teaching his dog "Tip," a large black retriever, to jump a rail erected for the purpose, and was assisted by his friend Dick Waring, an old school-mate, who wore a sailor's cap, and was shortly going to sea. Nancy was supposed to be reading a book, but was simply standing about, appearing interested in nothing. While poor Joe sat at the window looking at the performances of Tip. Ellen only was missing, she being in the house helping ma.

Nancy first saw the ladies and immediately ran into the house, and up to her room, to change her dress and prepare to be presented

to the visitors. Immediately after, from behind a holly-bush, Harry caught sight of them passing along the front walk to the house.

It was rude no doubt, but Harry couldn't help exclaiming—

"By Jove, Dick, did you see her?"

Whether Dick saw her or not, Tip did, for all excited as he was with his jumping he rushed through the bushes, barking and bounding, and in an instant he reared his great fore-paws to the shoulder of the younger lady as though he would devour her; while both the elder and the younger visitors screamed in terror at the apparent ferocity of the dog.

"Down, sir! down, sir!" roared Harry, running, with stick in hand, to the rescue.

Tip obeyed his master instantly, and from the wag of his tail and expression of his face seemed surprised that his antics should be mistaken for anything but genuine canine fun. Harry was about to give poor Tip a severe chastising when the young lady herself interfered and said:

"No, Sir; please don't whip the dog, I think he meant no harm."

Whereupon Mrs. and Miss Maylow passed into the house.

Harry returned to Dick Waring, who had been watching the affair from a little distance, and said:

"'Pon my honour, Dick, she's a stunner!" which last word, though not we believe a specimen of classical English, was evidently understood by Dick, for he answered with all the emphasis of which he was capable:

"By jingo, Harry, and I mean to say she is!"

Mrs. Maylow had intended a very formal call, made in her most patronising way. The audacity of Tip had, however, so effectually upset that important lady, that she found it quite impossible to maintain her dignity. And, when Minnie Maylow was once within the house it became plain that she had been more alarmed than at first appeared.

Mrs. Walton noticing her paleness begged that she would lie down upon the couch; and poor Minnie was obliged to yield, for she felt a strange giddiness coming over her. In a moment more she fainted. It would have been amusing had it not at the time appeared so serious to see how everybody looked at everybody else in expressing sincere sympathy for the unfortunate young lady thus lying unconscious in the drawing-room. Mrs. Walton at once flooded the face of the patient with cold water; while Ann the maid, directed to make a cup of tea, went, as she afterwards said, into 'flusters,' and broke nearly every hook off her gown as she worked with the bellows to make the kettle boil.

As for Harry he vowed he would shoot poor Tip upon the instant, and Tip, as though he well knew what was threatened, crouched away to his kennel with the most doleful look a luckless dog could assume. All the time the stately Mrs. Maylow, forgetting all her stateliness, went on wringing her hands and exclaiming:

"Oh, my dear girl! what shall I do?"

And of course, as the dear girl was unable to answer, she did nothing at all.

Ellen just helped her ma: gently removed the young lady's hat, uncoosed her dress, did all the little things she could think of, until, by-and-by, it seemed a terribly long time, Minnie Maylow awoke, as if from a sleep, and finding Ellen by her side gave her one of the sweetest smiles she thought she had ever seen.

At length Mrs. Maylow was obliged to leave. Minnie, however, upon the entreaty of Ellen, was allowed to remain at Daisy Bank until a later hour in the day, which arrangement gave not a little satisfaction to all in the house. There was no doubt that Minnie Maylow was a charming girl. A pretty face, a graceful manner, a sweet temper, all were hers. She was one of the few who win our hearts from the first, and keep them. Nobody could say exactly why she won them: as you cannot always say why a particular prospect of hill and dale and lowly cottage homes pleases you; though the charm is certainly there you do not care to say whether it lies in this or that special characteristic of the landscape.

Perhaps the reason for the satisfaction with which Minnie was regarded was as well expressed by little Walter, with his ready tongue, as it could then have been by any, when, in the course of the day, he took occasion to say:

"Miss Maylow, I 'ike oo."

"Do you, Walter, why?"

"Tos I do."

Walter was not content, however, with stating his own approbation of Minnie, for afterwards, when they had all ventured into the garden again, and Tip also had dared to come out from his kennel, he went on to say:

"Miss Maylow, we all 'ike oo."

"I am glad to hear it, Walter."

"Does oo ask tos why?"

"Well, why?"

"Tos oo wouldn't let Harry beat Tip."

Tip, who had now got over his disgrace, and, indeed, was rather regarded with extra favour (so changeable are the fortunes both of dogs and men), because he had been the means of detaining such a pleasant companion, frisked and ran, and wagged his tail to such a degree as to endanger the joints of that wonderful appendage.

It is certain that he had a strong sense of obligation to the visitor.

Harry feared much that his rudeness would give offence, because he looked at the young lady so often, and he felt and thought—well, it is impossible to say what he felt and thought, for perhaps it has already been found out that he was of a romantic turn of mind.

CHAPTER IV.—OLD BETHESDA.

AN acquaintance of a few weeks served to make Ellen and Minnie

intimate friends. The friendship could hardly have been closer had it been the growth of years. It was not that the girls were alike, excepting in the fact that they were both capable of great affection. In most respects they were diverse in character. Perhaps it was their differences which led to their intimacy. Ellen was self-reliant, accustomed to expect but little service from others, and to give much.

Minnie was gentle, clinging, confiding. Perhaps too confiding, for she had an entire belief in the trustworthiness of everybody; a belief, which, however beautiful in itself, may sometimes prove misleading. Minnie was not naturally selfish, but she was an only daughter, and had always been fondled; had had things done for her by Mrs. Maylow and servants, and so had been almost prevented from exercising those better promptings of her nature which express themselves in service of every kind.

Ellen was starting out from home one fine afternoon, accompanied by her brother Richie, who had a holiday from school that day. They had just reached the gate when Minnie Maylow came up.

"Good afternoon, Minnie," said Ellen and Richie together; "you're just in time."

"In time for what?" asked Minnie.

"Well, either to keep us at home, or to go with us on an errand into the town."

"Thank you, I've come with no special purpose, only to see you, so I shall be glad to accompany you."

"That's right, Minnie. I shall be glad to have charge of you both," said Richie, shouldering a light umbrella which he carried, and looking like a body-guard who felt proud of his charge.

They went along for some distance, chatting and enjoying the walk. Soon they left behind the quiet neighbourhood of Daisy Bank, with its neat houses standing alone, and in terraces; the trees in their first rich foliage; the delicate laburnums, hanging all lustrous with golden flowers, and the sturdy rhododendrons with their great bunches of bloom, the fragrant hawthorns as well, so common yet so lovely with their clusters and patches of little flowers both white and red; they left all these behind, and were presently in a busy part of the town.

"Look at that poor woman!" said Ellen.

A few yards before them was the stooping and tattered figure of an aged woman, who leaned heavily upon a stick with one hand, and with the other was trying to drag rather than carry a bundle of firewood. The burden was evidently more than she could manage.

"Why doesn't she get someone to carry it for her?" asked Minnie.

"I should say because she has no one," answered Ellen. "Suppose we offer to help her."

The proposal surprised Minnie more than Richie, who well knew how his sister despised all notions of what was merely genteel or lady-like when these interfered with doing a service for anyone. No doubt

it was in consequence of Ellen's example in many similar cases that Richie did not hesitate for a moment, but went forward and did what Ellen was about to do.

"Will you let me help you with your bundle, ma'am?" asked Richie. At the same time laying hold of the cord which bound the wood together, and beginning to carry it along. Ellen also stretched out a hand to assist him.

"An' sure ye're a hearty young gintlemon an' ladies ivery bit ye be, to peety a pore old woman like me. I thank ye very kindly, an' may all the saints in hiven bless ye."

And so they went on for a little distance, the poor woman all the time continuing to speak her gratitude as best as she could.

Richie was amused with the expressions which told of her Irish extraction; but Ellen and Minnie were much more moved by the sight of the tears which ran down her pinched and wrinkled face.

It was not necessary, however, that they should carry the bundle far, for just then a boy in a fustian jacket and cloth cap (of which half the peak was torn away and the other half flapped over his ear) came up, who had in his charge a donkey and cart. Addressing the old woman, he said:

"Why, sart'ney yer've got good helpers to-day, Mrs. O'Dorney; but I'm thinking yer needn't trouble the young gent anymore, and the ladies kind; my donkey will carry yer sticks. He's a rare willin' fellow is Bosker, if yer'll only let him sarve you."

"An' is it Jimmy Jortin now? an' sure I'm plased to see ye, my boy; an' ef ye be goin' hame yer ass shall carry the firewood, for I know it'll be right to yer master, my boy."

"May be yer'd hev a ride yersel, Mrs. O'Dorney?"

"An' sure it's Saint Patrick hissel that blessed me to-day; for I'm tired, verry, an' as yer cart is empty I think I'll get in, ef ye please."

As the old woman did not object to entrust herself to Bosker, she was assisted into the cart by Richie and the driver; the latter it appeared being acquainted with her home, which was in the part of the town to which he was going.

Mrs. O'Dorney gathered herself up into the middle of the cart and leaned on her bundle of wood. And after many further expressions of her thanks to her new-found friends she was slowly driven away in the jolting donkey cart, looking as happy as any duchess in a carriage with cushions of down.

Shortly after this occurrence Ellen, Minnie, and Richie arrived at a large square building situated in one of the wide streets. It had once been a handsome and imposing structure; there were those who thought it was so still. But bricks and stones were alike stained with the smoke and dust of many years. The building was not without some little space of open ground around it; but this scarcely gave it a more cheerful aspect, for it was paved with gravestones which had become as black as the stones in the wall. Surrounding the whole were tall iron palisades, once painted green, only here again the green had changed to black.

We will admit that the exterior of this building was not prepossessing to a stranger ; it was not so to Minnie. Yet there were hundreds of people in the town and elsewhere up and down in the world to whom it was fairer than any lordly mansion, or even than any rich pile of Gothic architecture which still stands in silent grandeur to witness to the religious devotion of a bygone age.

Ellen led the way to the back of this Bethesda, for such was its name, and found, as she expected, a gate and a door unlocked, by which the three entered. They found first a lobby, from which opened other doors. Passing through one of these they stood in a well-carpeted and neatly-furnished room. A cushioned seat went all round. There was a large table, and in the centre a pile of hymn-books. The fire grate shone like a mirror, and a "cold fire" was laid therein. By the table was an old-fashioned chair having much carved work about it, a relic of other days. In the windows were a few choice ferns. All was orderly ; no dirt ; no dust.

"What place is this ?" asked Minnie.

"It is called the minister's vestry," answered Ellen ; "but it is used for many purposes—committee meetings, prayer meetings, and all the rest ; there is something connected with the Church's work here almost every night. But come further, it will be strange if we find no one within." Ellen opened another door, which led into the chapel itself.

If the outside of this building was a little unsightly, the inside was beautiful. Minnie was surprised to see at a glance, from floor to ceiling, a well-proportioned, well-arranged, and well-finished interior. They soon discovered that work was going on within the chapel for they heard the sound of brushes scrubbing on the floor ; but where the workers were did not appear.

"Let us find them ?" said Ellen, and not succeeding below they ascended one of the wide staircases, and found themselves nearer to the scrubbing, though they could not yet see the scrubbers.

In a moment more, however, Ellen called :

"Mr. Norlan !"

Immediately the scrubbing ceased, there started up from the bottom of a pew, like Jack from his box, an odd-looking little man, with a shock head, wearing a coarse apron, which went from his chin downwards, having his shirt sleeves turned up above his elbows, and a brush in his hand. At the same moment there started up in like fashion from the corresponding pew on the other side of the gallery a slim, trim girl, with her hair braided tightly and fastened back upon her head, and also wearing a similar long apron and holding a brush.

"I think that name belongs to me," said the odd little man.



PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

XIII.—PRODUCTS OF SKILLED LABOUR.—POTTERY.



VESSELS to hold water would be an early requirement of the human race. The shells of some vegetable productions, as those of gourds and the larger kinds of nuts, would readily occur to the mind as adapted to this purpose. The skins of animals taken in the chase would form another resource. The bowls and dishes of the common Arabs are, and have been, made of wood; but for their production some tools must be possessed, as well as some dexterity in their use. It is a singular practice of some tribes to cast stones made hot into the fluids contained in wooden bowls, in order to raise their temperature; but the discovery that certain substances could be made to resist the action of fire would at once cause them to have the preference. Who made the discovery—the brickmaker or the potter—we have no means of knowing.

The art of the potter was especially necessary at an early period, from the scarcity of fuel in some parts of the East. Hence we are told of people “who make in their tents a hole, about a foot and a half deep, wherein they put their earthen pipkins or pots, with the meat within, closed up, so that they are in the turf above the middle. Three-fourth parts thereof they lay about with stones, and the fourth part of which is left open, through which they throw in their dried dung, which burns immediately, and gives so great a heat that the pot groweth so hot as if it had stood in the middle of a lighted coal-heap; so that they boil their meat with a little fire quicker than we do ours with a great one on our hearths.” As the Israelites must have had as much occasion to be sparing of their fuel as any people, and especially while journeying in the wilderness, it has been supposed that they must have had some such practice. It is certain that we read in the Levitical law of “ranges of pots,” thus showing their use at that period. It became more familiar in after times.

“I went down” says the prophet Jeremiah, “to the potter’s house, and behold he wrought a work on the wheels.” The potter is also alluded to in the New Testament, and the oldest of the classical writers refer to him occasionally, either for the sake of illustration or in direct eulogy of his skill. For ages he appears to have been the medium by which the appreciation of art, and the feeling for beauty in form, became developed under the growth of civilisation; and to this hour the specimens of his work which have survived the wreck of sovereignties serve to mark the advance and retrogression of taste and refinement at different epochs.

Of earthenware, jars and drinking vessels were chiefly made; and

it is probable, from the unvarying character of Eastern customs, that they had the same shapes as those at present used by them. Vessels formed of clay hardened by the sun, of a globular shape and large at the mouth, not unlike the vitriol bottles used in this country, but somewhat smaller, have been observed by modern travellers as borne by females going down to the well to fetch water ; while their resemblance to the vessels used at the marriage of Cana in Galilee was exceedingly interesting.

In Egypt and Western Asia the inhabitants have in common use vessels of porous clay, lightly baked, and rather thin in proportion to the size of the vessels. The water they hold constantly oozes through the minute pores of the vessel, forming a thick dew or moisture on the outer surface, the rapid evaporation of which reduces the temperature of the vessel and of the water also much below that of the atmosphere, so that the inhabitants enjoy a perfectly cool and refreshing draught. The vessel forms at the same time a most effectual filter. The work of the potter continues to be, as it was, extensive in the East. The people are accustomed to break their earthen vessels when they become defiled, just as they were required to do under the Levitical law.

The art of the potter as at present practised in Europe is comparatively of modern growth. During the feudal ages there was no such convenient substitute for the baron's golden wine-cup or silver goblet as we have now in our cheap crockery ; but the middle and poorer classes drank from the wooden quaigh, the cow's horn, "the leathern bottle," or the tin pannikin, or wanting all of these, from the clumsy earthen pipkin. It was not until long after the Venetians, the Germans, the French, and the Hollanders had succeeded in the production of excellent pottery, that the English were in a condition to rival them—our first manufactories of any note having come into operation towards the close of the reign of Elizabeth. Even so late as near the close of the seventeenth century the potters of Staffordshire were ignorant of the art of effectually glazing their ware, which they made from clay dug on the spot.

The arrival in England about 1690 of some Dutch potters, who, encouraged by William III., settled in this country, led by degrees to the diffusion of improved modes of manufacture ; and in 1720 the introduction of ground flint as an element in the composition of the ware gave a new impetus to the art. Its value was accidentally discovered by Mr. Astbury, a potter of Skelton. Men of capital now embarked in the manufacture, the growing importance of which was soon made manifest by the beautiful productions they sent forth. Then Josiah Wedgwood came upon the stage, bringing talent and enterprise of no ordinary degree to the prosecution of the labours he loved, and ere long, by the production of his celebrated cream-coloured ware, established a high character for English manufactures. Of this new kind of pottery Wedgwood was permitted to present some specimens to Queen Charlotte, who was so delighted with it that she ordered a whole service of it, and commanded that it should be desig-

nated "The Queen's Ware," and that its inventor should receive the title of the "Royal Potter."

A royal potter Wedgwood truly was, the very king of earthenware manufactures, resolute in his determination to attain the highest degree of perfection in his productions, indefatigable in his labours, and unstinting in his outlay to secure that end. He invented altogether seven or eight different kinds of ware, and succeeded in combining the greatest delicacy and purity of material, and utmost elegance of design, with strength, durability, and cheapness. The effect of the improvements he successfully introduced into the manufactures of earthenware is thus described by a foreign writer:—"Its excellent workmanship, its solidity, the advantage which it possesses of sustaining the action of fire, its fine glaze, impenetrable to acids, the beauty and convenience of its form, and the cheapness of its price, have given rise to a commerce so active and so universal, that in travelling from Paris to Petersburg, from Amsterdam to the furthest port of Sweden, and from Dunkirk to the extremity of the south of France, one is served at every inn with Wedgwood ware. Spain, Portugal, and Italy are supplied with it, and vessels are loaded with it for the East Indies, the West Indies, and the continent of America." Wedgwood himself, when examined before a Committee of the House of Commons in 1785, some thirty years after he had begun his operations, stated that from providing only casual employment to a small number of inefficient and badly remunerated workmen, the manufacture had increased to an extent that gave direct employment to about twenty thousand persons, without taking into account the increased numbers who earned a livelihood by digging coals for the use of the potteries, by carrying the productions from one quarter to another, and in many other ways.

Though Wedgwood carried the art to great perfection, yet many improvements have been made since his time, though none perhaps greater than those that have been effected in the establishment which he built at Etruria, a few miles from Stoke-on-Trent, which is still in the hands of his descendants.

The worthiest successor to Wedgwood whom England has known was the late Herbert Minton, who was scarcely less distinguished than his predecessor for perseverance, patient effort, and artistic sentiment. We owe to him in a great measure the revival of the elegant art of manufacturing encaustic tiles.

We will now introduce the young reader to the scene of the potter's labours, and do our best to render the several processes intelligible to him. The interior of a Staffordshire pot-work, which may occupy some ten to fifteen acres of ground, has a rather forbidding aspect at the first view; a number of monster cone-shaped furnaces of black, smoke-dyed brick are scattered here and there over the area, and are connected by sheds and dreary-looking brick buildings, filling up the whole space, save only so much as is required for the narrow roadways intersecting them. We thread our way

through these to a kind of open shed in the neighbourhood of a large steam-engine, and here we are in the presence of the raw materials of which the ware of the potter is composed. These consist of several kinds of clay brought from Devonshire and Dorsetshire, and the China clay, as it is called, a species of decomposed felspar, from Cornwall, together with reserves of flint from Gravesend, a light kind of granite, the bones of animals, the clay and marl of the district, and some other matters. All these things have to be prepared, by cleansing, grinding, and purifying, for mixing into the plastic mass which is to form the ware. For this purpose the clay is thrown into large vats, where it is diluted with water to the consistency of thin cream, and thus diluted it is called "slip." The flint is first burnt in a kiln resembling a lime-kiln, and while hot it is quenched in water, and broken into small fragments; it is then pulverised so fine as to offer no perceptible grittiness to the *taste*. The granite is ground in the same way, and the bones, being first calcined, are also similarly ground, though they are only used in the production of china, not of ordinary ware.

The several materials being ground and properly diluted, are now carried to an upper floor, where they are mixed together in certain proportions in a large vat. When the various fluids have been well blended into one kind of slip, it is drawn off into a cistern, and thence into a long wooden trough, having a flat bottom pierced with holes. Through these holes the fluid falls in a continuous stream upon a series of fine sieves; the sieves vibrate quickly under the action of machinery, and the slip drips through them into a receptacle beneath, leaving the coarser grains of earthy matter behind. The slip is then put into large shallow drying-pans, beneath which fires are made; and there it remains until it becomes a thick paste. It is then worked or ground in a mill, or beaten with wooden mallets. The paste is next cut into small pieces, which are thrown together with great force, so as to drive out the air bubbles and make it quite smooth and solid. If the air be not quite driven out, the earthenware when baked will be rough and blistered, as we sometimes see common ware.

The paste is now fit for the purposes of the thrower or modeller. Flower-pots, sugar-pans, vases, and other and more graceful articles are moulded on the potter's wheel.

Now this potter's wheel is one of the most ancient instruments of human industry, one of the earliest inventions by which man utilised and economised his labour. It consists of a large disc of wood, to which a rotatory motion is given by the workman's foot. A second and smaller disc, on which is placed the paste for working, is fixed upon the upper extremity of the vertical axis to which the larger and inferior disc is attached. Seated on the bench, the workman places in the centre of the disc a certain quantity of soft moist clay, and turning the wheel with his foot, moulds the said paste with both hands, until it assumes the

desired shape. You can imagine no prettier sight than that of a skilful potter causing the clay under his nimble fingers to assume the most varied forms. It seems as if by miracle the vase was created suddenly, and the rude clay sprang into a life and beauty of its own. Of course the operations of the thrower at the wheel are confined to articles which are perfectly circular in form ; and if any of these, such as jugs, ewers, and drinking cups, have to be furnished with lips, spouts, or handles, such additions are made by another hand while the clay is comparatively soft.

Leaving the thrower at his work, we follow the wares he has fashioned to the drying-room. Here they are ranged on shelves in vast quantities, and exposed to a gentle heat. When half-dried, the vessels are again turned upon another kind of lathe, something like that used by the turner in wood.

Articles that are not round are rolled out like dough, into thin sheets, and then pressed into moulds. In this manner, also, are made raised figures, as, for instance, of animals and flowers, which are fixed with wet paste upon drinking-jugs and the like.

Plates and dishes are beaten or rolled out of lumps of clay, and then turned upon the mould or block of the potter's lathe.

The vessels being quite dry are put into baked clay cases, in the shape of band-boxes, and are piled up in a kiln or oven, with a fire in the middle. Here the vessels are baked until they are white, or the colour of *biscuit*, by which name they are called. Most earthenwares require after baking to have a vitreous coating, as they are in their natural state porous. This coating is called *glazing*. The pieces to be glazed, after being dried in the shade to the proper degree of consistence, are dipped into a mixture made up of the oxides of lead and sulphuret of lead, and are afterwards baked. On their withdrawal from the furnace the lead is found settled as a glassy coat on the surface of each piece, giving it a beautiful gloss, and rendering it, by filling up the pores, quite waterproof. It is in connection with this process that the many beautiful colours are given to fine earthenware. The ware when glazed and baked is fit for use. Before the art of printing upon earthenware was understood, plates, dishes, &c., were of plain white ware ; but we have our jugs, pots, &c., now ornamented with landscapes and figures. Painting by the hand is very expensive, but a method of transferring designs from paper, by means of copper engravings, has recently come into use, and has added much to the beauty of earthenware. The finest and hardest kinds of pottery are called porcelain and *china* ; for this ware was first made in China, a large country in Asia, and that from which tea is brought. Theoretically there is a considerable difference in the materials which compose the substance of china from those which form earthenware ; but among English potters the chief difference seems to consist in the addition of a large percentage of calcined and ground bones to the ordinary constituents of the earthenware—the quantity of bone differing materially in different establishments.

Though the art of the potter has not been practised in this country until a comparatively recent period, the manufacture of pottery is now very extensive. It is estimated that our English potteries not only supply the demand of the United Kingdom, but export ware to the value of nearly a million and a half annually. The establishments are about 190 in number; employ 75,000 to 80,000 operatives; and export 90,000,000 pieces.

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

II.—LABOUR AND LUCK.

MOST of us believe in labour; we are *compelled* to believe in it, our enjoyments, our comforts, yea, our very existence, depends upon it. The earth, rich as it is, would starve us upon its bosom if we did not labour. Some few believe in luck. They hope to "grasp the skirts of happy chance." They look for "something to turn up," but do not go and turn it up. They expect that by-and-by the tide will turn in their favour; that if they "throw pennies upon the housetops dollars will rain down upon their heads," and that if, like the lucky man, "they are pitched into the River Nile, they will come up again with a golden fish in their mouths." Only give such people a luck-penny, and they hope soon to have a fortune.

Even people who honestly toil are not all free from a slight touch of faith in luck. The author of "Gentle Life" says, "Why do sailors cling to port on Friday and love the ship on Monday? Why did the ancients venerate white stones and discard black ones? Why do ladies dislike to see knives and forks put crossways on the dinner-table?" We may add to these questions, Why do people avoid getting married on Fridays? Why do the friends of the bride and bridegroom throw after them old shoes and handfuls of rice? The answer to all these questions is, because people are, more or less, under the influence of faith in luck. Some of our readers may say it is silly and weak; so it is, and may well excite our laughter. Still, the fact is there, laugh as we may. Who will deny that some people seem to be unlucky? They appear to be born to misfortune, and their misfortunes come in the most unexpected and singular forms. Of one unlucky man it is said "that he fell upon his back and broke his nose."

On the other hand, some are surprisingly fortunate. Everything they do prospers, "all they touch turns to gold."

"There is a time in the affairs of men which, taken at the flood, leads on to fortune." And these happy people know how to take the tide at the flood, and so are led on to fortune. Possibly few of us believe that, here and now, men meet with just that measure of success which seems to be merited by their sense, goodness, and energy. But we do believe that if not here, hereafter, if not on earth in heaven, men will be rewarded according to the deeds done in the body; that whatsoever a man soweth that shall he reap, and that even now *that* success is the most valuable which is the outcome of honest, earnest toil, and not the result of what we call chance, luck, or fortune.

"In all labour there is profit." "No pains no gains." In these proverbs there is no little truth. The brave worker may miss the end for which he toils, but he often secures other and better ends. Saul may not find the asses which he seeks, but he finds a kingdom. There is a capital story told of a wise man who, when dying, called his sons to his bedside and said, "My children, I am rich, and soon all my wealth will be yours." The young men were mightily pleased to hear this, and drew nearer still, hoping soon to receive some of this money. The old man said, "No, my sons, the money is not here; these weak hands hold nothing; my riches are in the fields, dig, and you will find them." They did dig, early and late, long and resolutely, and soon they grew strong and manly by labour. Soon the soil, so well turned over, brought forth rich crops, and they found the vast wealth of which their father told them.

Some are quite willing to possess the wealth, but utterly unwilling to give the work. They "wish to have the skin clean without being wet," to have a pure character and an honoured name without the needful self-sacrifice. A homely Scotch proverb says, "He that would eat the kernel must crack the nut." The kernel we desire may be mental energy and culture, or moral worth and dignity, or domestic plenty and bliss. Well, if we would enjoy any of these rich kernels we must crack the hard shells which surround them; crack them with patient thought, honest endeavour, and fervent prayer. "As vinegar to the teeth, as smoke to the eyes, so is the sluggard to his employers." A lazy man is ever in the way of others; his right place is in Lubberland, where they give half-a-crown a day for sleeping, and where yawning is paid for as overtime. His only approach to energy is when he runs out of the way of work, or when he languidly cries, "a little sleep, a little slumbering, a little folding of the hands."

The most unfortunate event that ever happened to some people is what they call their "fortune." They were "born with a silver spoon in their mouths," and they have never been much better than spoonies. Work is beneath their dignity. The silver spoon is dim and cankered. Their faculties are rusty with vice and sloth. Their parents were rich but not wise. Says Beecher, "Sons of rich men! They are like the polyp that floats useless and nasty upon the sea,

all jelly and flabby, no muscle, no bone, it opens and shuts, shuts and opens, sucks in, squirts out. Of no earthly use, account, or influence, such are these poor fools." Lazy people often complain of their misfortunes when they might well complain of their own sluggishness. "To a sinking ship all winds are contrary." A rotten *stump* will stand a long while if nobody touches it, but at last somebody touches it and it falls. "An idle brain is the devil's workshop." If the man is idle Satan is busy forging iron fetters, sowing hateful tares, and marring the image of Almighty God.

1. Labour should be energetic.

Not half-hearted and shuffling, but downright earnest. Whatsoever Hezekiah did he did it with all his heart, and "whatsoever thy hand findeth to do, do it with thy might."

2. Labour should be timely.

The most earnest and desperate efforts will fail if not put forth at the right time. "You cannot turn the mill with the water that is gone by." Don't waste your time, and then make a rush and scramble at last. Do something right, noble, and brave, and *do it now*.

3. Labour should be concentrated.

Select some one fitting and worthy object or occupation. Then bend towards it your whole energy. Don't fritter away your strength by too many pursuits. Better be a master of one trade, or subject, than a muff at a dozen.

4. Labour should be cheerful and Christian.

"Do it heartily, as unto the Lord." Into the lowliest toil infuse a lofty purpose and a saintly disposition. A lady of noble purpose was reproached because she mingled with the poor and wretched in slums, and alleys, and courts, she replied, "Our dignity lies here. We are servants of Jesus Christ."

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

FEBRUARY.

	MORNING SUBJECTS.		Golden Texts for Repetition.
	SUBJECT.	FOR READING.	
	FIRST QUARTER.		
8	Christ's First Miracle ...	John ii. 1—12 ...	ver. 11.
10	The Temple cleansed.....	John ii. 18—25 ...	ver. 16.
17	Nicodemus taught	John iii. 1—17.....	ver. 7.
24	The Woman of Samaria...	John iv. 1—15.....	ver. 14.

AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
3	Jehoshaphat reprov'd ... 2 Chron. xix.	Prov. xv. 32.
10	Jehoshaphat helped of God 2 Chron. xx. 1-4, 14-25	ver. 20.
17	Joash repairing the Temple 2 Chron. xxiv. 1-22	Ps. xxvi. 8.
24	Uzziah's Pride punished.. 2 Chron. xxvi. 1-10, 16-28	Prov. xvi. 18.

MARCH.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
3	Jesus and the Samaritans John iv. 31—42....	ver. 42.
10	The Nobleman's Son healed John iv. 43—54....	ver. 50.
17	Jesus at Bethesda..... John v. 1—16.....	ver. 14.
24	The Heavenly Bread..... John vi. 22—37....	ver. 51.
31	"What think ye of Christ?" John vii. 37—53...	Matt. xvi. 16.

AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
3	The Wickedness of Ahaz 2Chron.xxviii.1-15,2	2-25]Isa. i. 28.
10	Reformation underHezekiah 2Chron.xxix.1--11,2	7-31]xxxi. 21.
17	Hezekiah and the Assyrians 2 Chron.xxxii. 1—23	ver. 8.
24	Manasseh'sSin&Repentance 2 Chron. xxxiii. 1-19	2 Cor. vii. 10.
31	Review of the Quarter's L	essons

BIBLE QUESTIONS.

A GOOD NAME.



THE man who had this name is only mentioned twice in the Bible, and then only in connection with, and in dependence on, another. We are told a little of what he heard, nothing whatever of what he said, and only one thing of all he did. Yet we know him to have been a man of great courage and faith, and one to be thoroughly depended on at a most critical time. We also know that he had a band of exceedingly choice companions, as faithful and brave as himself, and that his one work prepared for their work in a very wonderful way. Who was this man? Who were his exceedingly choice companions? What was that one deed of his of which we are told? And how does it prove him to have been the kind of man above described?

The above has been sent us by "A Sunday-school Teacher," who will please supply us with the answer.

We [are exceedingly sorry to trespass upon the patience of our

young friends who, during the past year have answered the Bible Questions, but personal and domestic affliction has prevented us completing the Prize List. We may, we trust promise it for a certainty next month, and the books shall be enclosed in the March parcels.—EDITOR.

Poetry.

THE CHILD AT PRAYER.

INTO her chamber went
 A little child one day,
 And by a chair she knelt,
 And thus began to pray :
 " Jesus, my eyes I close,
 Thy form I cannot see ;
 If Thou art near me, Lord,
 I pray Thee speak to me."
 A still small voice she heard unto her call :
 " What is it, child ? I hear thee ; tell me all."
 " I pray Thee, Lord," she said,
 " That Thou wilt condescend
 To tarry in my heart,
 And ever be my friend.
 The path of life is dark,
 I would not go astray ;
 Oh, let me have Thy hand
 To lead me in Thy way !"
 " Fear not ! I will not leave thee, child, alone :"
 She thought she felt a soft hand press her own.
 " They tell me, Lord, that all
 The living pass away ;
 The aged soon must die,
 And even children may.
 Oh, let my parents live
 Till I a woman grow !
 For if they die, what can
 A little orphan do ?"
 " Fear not, my child ! whatever ills may come,
 I'll not forsake thee, and I'll bring thee home."
 Her little prayer was said,
 And from her chamber now
 Forth she passed with the light
 Of heaven upon her brow.
 " Mother, I've seen the Lord,
 His hand in mine I felt ;
 And, oh ! I heard Him say,
 As by my chair I knelt,
 ' Fear not, my child ! whatever ills may come,
 I'll not forsake thee till I bring thee home.'"



CHILD AT PRAYER.

THE CHILD AT PRAYER.

THE picture we give this month is a very interesting one, and we should rejoice to think that it truthfully represented the habit of every child who reads the INSTRUCTOR. We like children to love play, and also to love work when it is given them to do, but above all we like them to love prayer. Why? Because prayer is the duty even of young children. They ought in this way to acknowledge God, their dependence upon Him and His authority over them. They cannot be good children unless they fulfil this duty. But prayer is more than a duty, it is a privilege, and a very precious privilege too. Prayer is making request of God for the blessings you need and which He has promised to give. Now ought you not to be thankful that you are permitted to do this? You think it kind of your parents that they allow you to go and tell them your wants and sorrows, and when you do so for them to sympathize with you and listen to your requests, and either grant them or lovingly say why they cannot. Now, that is just how you ought to think of God, for He is your Father in heaven. He loves you, He cares for you, He wishes you to be His good and happy children, and so He gives you the privilege of praying to Him. You may pray to Him when you have been naughty and done wrong, and He will forgive you. You may pray to Him when you feel ignorant, and He will give you wisdom. You may pray to Him when you are in sorrow, and He will comfort you. You may pray to Him when you find that your hearts are sinful, and have in them wrong desires and feelings, and He will create within you a clean heart and give you a right spirit. You may pray to Him when you go to school that He may help you in getting your lessons and doing successfully all your school tasks. You may pray to Him when you play that He may keep you from being false or unfair in your conduct towards your playfellows. Indeed you may pray always and without ceasing, and you will never find that God is weary of hearing or unwilling to give you His blessing.

In the INSTRUCTOR for February we gave some nice verses on the subject we have now been writing about. We gave them then by mistake, as we meant them to accompany the picture on the preceding page. Will our young friends refer to them? They would also please us if they committed them to memory.

J. HUDSON.

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of "A Year at School," &c., &c.*

Letter No. 86.

FROM CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,
Feb. 12th, 187—.

DEAR BEN,—

You see your expectation that I should reply by return of post was doomed to disappointment. Your long and interesting letter was very welcome, and if I could have done so, I would have written next day. But I had to go to Hammerthorpe on an errand for father, and when I got back there was the post-bag to make up, so I could not write until to-day.

There is to be a change in the postal arrangements here from the first of next month. As you know, the Tinbury post-cart used to call here for our letters on the way to Hammerthorpe. On the 1st of March there will be a new post-office opened at Upleigh, and in future the Tinbury cart will go round there, and father will himself take the Woodbourne letters direct to Hammerthorpe in a conveyance to be provided from the King's Arms Inn. Of course he will fetch them in the same way in a morning. I shall have the drive on Saturday afternoons, of course, and shan't I just delight in it!

What a silly booby the "Honourable Mr. Bowles" must be! I'm afraid he'll find Waterside House so uncomfortable that he will leave before the term is up, if you and your friend continue to treat him so unmercifully. It must be a great change for him, coming from a home where he did as he liked, and was perhaps waited on hand and foot, to find himself the jest and ridicule of a lot of boys. I feel a bit sorry for him, you know. I wouldn't change places with him even if I felt sure of inheriting his uncle's title to-morrow. Father always says the grandest inheritance for a lad is a good constitution, a sound mind, and a creditable name. I believe I have got the two first. I *know* I have the last, for, thanks to my father's and grandfather's good characters, go where you will round Woodbourne, the Thorntons are spoken well of.

As to your treatment of young Bowles on the ice, I'm afraid you carried your sport a bit too far. Perhaps he could not help being afraid. Some folks are naturally timid. For myself, I never knew what it was to fear ice or water, or indeed anything else, unless it was my father's or mother's displeasure; but there is a young fellow in our office so timid that he actually dare not walk across a frozen pool. And yet he is a sharp, clever lad, and no coward either. I believe he'd tell the truth if he had to die for it. Perhaps young Bowles is one of the nervous sort. And then, you know, as a new boy he could not be expected to know that the water was so shallow.

He might have thought it dangerously deep. At any rate, he was fearfully frightened, and if you had remembered the golden rule Mr. Jones used to talk about so often, I don't think you would have been quite so hard on his failings, foolish dunce though he is.

But I suppose you won't thank me for this serious talk. If your friend Instone should catch sight of this letter, he will say I have taken to preaching sermons, and he might send me a white choker to-morrow for a valentine.

With very best wishes, I remain, my dear Ben, yours most affectionately,
 CHARLIE THORNTON.

Letter No. 87.

FROM BEN BARLOW to TOM BLUNT.

Waterside House, Worcester,
 Feb. 15th, 187—.

MY DEAR TOM,—

Thanks for your offer of rabbits. If I were at home I think I could not help having a deal with you. As it is, I only see the rabbits about one month out of six, so I don't think it is worth while my buying any more.

I hope you will sell well, however, and get a jolly big sum for your missionary box. I remain, yours truly,
 BEN BARLOW.

Letter No. 88.

FROM TOM BLUNT to BEN BARLOW.

Old Mill, Woodbourne,
 March 7th, 187—.

DEAR BEN,—

Our Annual Missionary Meeting was held last night. Your father took the chair. How much do you think there was in my missionary box? I had a wonderful sale of rabbits. I could have cleared out the whole stock, but that would have been like killing the goose that laid the golden eggs. It was a capital idea of our minister's to advertise the sale in the papers. Folks came from five and ten miles away to see and buy the missionary rabbits. Well, when I had sold all I meant parting with, I took my box to the secretary, and he opened it and counted the contents. It came to £5 4s. 8½d.

The minister was so pleased that he wrote some verses for me to say at the meeting. I suppose you know we have recitations by the collectors. The title of the piece he wrote was "The Missionary Rabbit Pen." There were about twenty verses altogether, and it finished up thus:—

"Now, in future, don't say there is nought you can do
 To help on our mission'ry work.

I've succeeded, and so there's no reason why you
Any longer your duty should shirk.

"Since my mission'ry rabbits gained more than five pound,
Try what mission'ry poultry will bring,
Or an apple or pear tree, or even some ground
Set apart for the missions in spring.

"It's surprising how fruitful your ventures will be
When devoted to God and His cause;
And I hope that in next year's report we shall see
I've gained more than your hearty applause."

There was a good attendance at the meeting, and the collection was a large one, so that altogether we have raised for the missions nearly twice the amount we did last.

For the trouble I have taken to get the money, and to encourage me in the future, the committee presented me with a beautiful volume of Livingstone's Travels. I have got halfway through it already. It is as good as any adventures I ever read, and all true into the bargain. Believe me, Ben, yours very truly,

TOM BLUNT.

Letter No. 89.

From BEN BARLOW to DR. BARLOW.

Waterside House, Worcester,
March 17th, 187—.

DEAR FATHER,—

We had a terrible mishap here last night. A fire broke out in our bedroom and poor Ted got badly burned. He was reading in bed by candlelight, and I suppose he fell asleep and the candle burned down and fell on the bed.

It was a wonder we were not both suffocated, for when I awoke the room was full of smoke. A boy from one of the other rooms discovered the fire and wakened us.

They took Ted straight off to the Infirmary directly they could get a cab. Dr. Tasker at first thought of telegraphing for his father, but the house surgeon said his injuries were not serious enough to call for that, so he will write by this post.

Ted was unconscious when they took him to the Infirmary. It seems he has asked after me a great deal, so they have sent for me to go and see him. I expect he is anxious to know if I am burned at all.

For dear mother's satisfaction, please assure her I am quite unhurt by the accident.

I am now off to see poor Ted; so with love to you all, I remain
your affectionate son,

BEN.

Letter No. 90.

FROM BEN BARLOW to ERNIE INSTONE.

Waterside House, Worcester,

March 17th, 187—.

MY DEAR ERNIE,—

I know Dr. Tasker has written to tell your father of the sad accident that happened last night to Ted; but as I have just returned from visiting him at the Infirmary, I thought I would write a few lines to you.

I am pleased to say Ted is very much better now that he has recovered from the effects of the smoke, and his burns are not nearly so bad as the surgeons at first supposed, though they are bad enough, and must smart terribly, poor fellow!

He was able to talk to me a bit, and like the good-hearted fellow he is, said how glad he was to find out that I had escaped unhurt. He is afraid you will all be dreadfully anxious on his account.

I have got the house surgeon's word that he is not in any danger, and you may be sure he will have the best nursing and the most skilful doctors to attend him while he is in the Infirmary. So you must try and be as hopeful as you can. I am sure it has lifted a great weight off my mind to know he is no worse than he is.

With regards to you all, believe me, my dear Ernie, yours affectionately,

BEN BARLOW.

Letter No. 91.

FROM DR. BARLOW to BEN BARLOW.

The Laurels, Woodbourne,

March 18th, 187—.

DEAR BEN,—

You see what comes of disobedience to rules. I know Dr. Tasker allows no lighted candles in the dormitories if he knows of it. I should think your friend Instone will never forget the lesson, and it ought to make an impression on you, for I judge from your letter that, if the fire had not been discovered in time, you too would have been burnt, and perhaps fatally. Thank God you are safe, and that your roommate escaped as lightly as he did.

If I can conclude my visits to-morrow by twelve o'clock, I shall run down to Worcester by the mid-day train to see your friend. Not that I doubt for a moment but that he is being well cared for—the Infirmary doctors are the cream of the profession—but I feel interested in him as your friend, and as one who has visited us here, and I want to judge for myself to what extent he is hurt.

You may mention to Dr. Tasker that I purpose coming if I can make it convenient. Your mother and sisters join me in love to you. Your affectionate father,

OLIVER BARLOW.

Letter No. 92.

FROM TOM BLUNT TO BEN BARLOW.

Old Mill, Woodbourne,
March 20th, 187—.

MY DEAR BEN,—

What is this that Bob tells me about you and Ted Instone having a fire in the room? He could not tell me anything about it except that Ted had to be taken to the Infirmary, and that you were not hurt at all. I haven't been able to see your father to ask him about it. Bob tells me he went to Worcester yesterday to see Ted.

When you have time, let me know all about how it happened. We are very glad you were not hurt, and though we don't know your friend so well, we are very sorry for him, and hope he will soon recover. Believe me, yours truly,

TOM BLUNT.

THE PRISONER'S CHILDREN.

By MRS. MELDRUM, *Author of "NED'S SEARCH."*

CHAPTER III.—NEW EXPERIENCES.

"**W**AKE up, Bernard," said Mrs. Kelly next morning; "breakfast is nearly ready, and you wouldn't like to be late for school."

"All right, mother," and the boy sprang out of bed, and soon appeared, bright and rosy, in his Sunday suit, and partook with hearty appetite of the plain but wholesome food.

"Where's my hymn-book? Oh, here it is. Good morning, father, good morning, mother. What, that tie wrong again?"—as Mrs. Kelly re-tied the blue bow at his neck—"I believe it's never right unless you do it. Is it, mother?"

"Well, it's better now; away with you, and don't hurry, it's too hot."

"It's not so hot inside, mother. I didn't think this poky room could look so nice."

"It's well enough for where it is, but it's very different from home, isn't it, John?" as Bernard shut the door, and bounded at two jumps down the steps.

"'Home is where the heart is,' didn't you use to tell me, wife? You must try and settle down; it's nearer for Bernie's schools and my work, and with what I shall get now we may lay a bit by against we get old."

"Yes, of course I know we expect it'll be for the best, or we shouldn't have come; but after all it's a deal of rent to pay for two rooms, and it's but poor they look, though I've done my best."

"There's not many would have made it look as well, wife. I'm very well contented."

And but for reminiscences of a breezy country lane and a comfortable, rose-covered cottage they might well have been content. All that woman's hand could do had been done, and the floor was white as scrubbing could make it. So was the dresser under the window, and the window itself was screened from outside gazers by curtain and blind of snowy whiteness. A few carefully-tended plants blossomed on the wide sill, and a canary hopped about in his cage above them, and warbled his morning carol right joyously.

"There now, all's straight; I'll just go down and see how those children are coming on. I hope they've had a good night, poor things."

Anything but a good night it had been to Lucy. Lonely, troubled, and oppressed with the new sense of responsibility, she woke repeatedly, hot, frightened, and miserable. She was very glad when, from a feverish dream of dark prison-cells and chinking chains, she awoke and found the sunlight streaming hotly into the room. Willie woke before she was dressed, and remembering what had happened, commenced crying in a low, wailing way that went to his sister's heart.

"Hush, Willie; don't cry, don't; wait a bit, an' I'll dress you, an' we'll do somethin' nice."

"What?" asked the child.

"Oh, I don't know, we'll see. There, now, come here;" and with more than usual tenderness Lu replaced the soiled clothes Willie had taken off the previous night. No thought of washing either herself or Willie appeared to enter her mind, and the grimy fingers with which she cut a thick slice from the loaf for breakfast might have taken away the appetite of a more fastidious person.

"But I want a drink, Lu, I want a drink."

"Well, I'll fetch some water. Eat your bread, and don't cry while I go."

Taking her can, Lucy slowly ascended the steps and passed along the street to the pump which served several houses. The town was not yet supplied with pipe-water, though the reservoir for the purpose was in process of construction, giving work to numbers of men, amongst whom were Brown, Tomlins, and Kelly. There were several children congregated round the pump waiting for their turns, but Lucy pressed forward, and possessing herself of the handle, which a very little boy was making tremendous efforts to wield, she filled his can, then her own, and turned to hasten back to Willie.

"Nay, nay, that's not fair, I say," said a big rough boy, pushing her against the wall as she attempted to pass him. "Turns aren't as they are taken, I can tell you, and I was here before you."

"So was I," "And so was I," echoed from the little group.

"Empty it out again and wait your turn," ordered the first speaker, the tyrant of the neighbourhood.

"I shan't!" retorted Lucy; "let me go, you wicked boy!"

"Oh! oh! I'm a wicked boy, am I? Well, and what are you? Whose girl are you to talk about wickedness? Didn't your father kill a man yesterday? Didn't he, I say?" he demanded, forcing her violently back as she struggled to escape.

"No, he didn't, he didn't," she shouted. "But I'll kill you if you don't let me go; I will, I will," she screamed, as the boy laughed derisively.

"Empty your can, and then I'll let you off. I'm a man of my word, I am, an' I've said it."

"Leave go, then; I can't while you hold me tight."

"But will you?"

"Yes, I will."

"Sure and certain?"

"Yes, sure and certain."

Bill left loose, and Lu stooped as if to fulfil her promise, then, exerting all her strength, lifted the can and discharged its contents at her tormentor, and fled before he could recover his sight to follow.

Breathless and terrified, Lu reached her cellar refuge, barred the door, and crouched down out of sight of the window, giving Willie an excited account of the occurrence, and both children remained tremblingly listening for the sound of Bill's arrival.

They had begun to think he was not coming when a gentle knock made their hearts beat.

"Tisn't him, he wouldn't knock so quiet," whispered Willie.

"Hush! he *would*, just to make us think it wasn't him."

"Say 'Who's there?'"

"No. Hush! keep quiet, Willie."

The knock was repeated, rather louder, and then a voice said, "Is nobody in, or are you asleep?"

"It's not Bill, it's not Bill," exclaimed Willie; "open the door, Lu, quick!"

Thus urged, she ventured to inquire, "Who's there?"

"It's me, Mrs. Kelly, that was talking to you yesterday on the steps."

"Oh, that nice woman, Lu, that's come instead of old Jenny. Open the door, she'll take care of us." Then, as Lu admitted Mrs. Kelly, he seized her dress, exclaiming eagerly, "You won't let Big Bill come, will you?"

"What, love?" she asked, bending down nearer the white, frightened face. "Who is Bill?"

Willie told her, and gathered confidence as he talked, for Mrs. Kelly's face was full of pity as she listened, and as her eye wandered about the untidy, close apartment.

Lu stood by, silent and seemingly indifferent. She was so unused to kindly words and pitying looks that they only roused her suspicion, and actually, at the present moment, the fear suggested itself that

Mrs. Kelly might have designs upon the prime pop or gingerbreads, so that it was with great difficulty that the good woman was able to persuade her to come up into her room, where Bill would not dare to trouble them.

Willie's urgent entreaties prevailed, however, and after seeing Mrs. Kelly out with the boy in her arms, Lu looked the door and followed.

Mrs. Kelly's mind began to be somewhat perplexed respecting their evident absence of cleanliness, and to wonder if she was doing right to bring such utterly lost creatures into intercourse with her own boy.

After nursing Willie for some time, and listening to his artless talk, while Lu sat silently on a little stool, her head in her hands and the long black hair falling over those, Mrs. Kelly said, "Now I must get dinner ready. Wouldn't you like to watch me?" And placing Willie in a comfortable position, she moved about quickly but quietly, setting on the potatoes and putting the meat to roast, laying the cloth for five, and all the while giving cheery heed to the child's queries and remarks.

"Where are you going now?" he asked, as she went into the tiny place they used as a scullery and where stood tubs and mugs of fresh-drawn water.

"To wash my hands. Would you like to come with me?"

Willie assented, and watched with interest while his friend washed hands, arms, and face.

"Now mine," he said, stretching them out, for Mrs. Kelly had evidently enjoyed it. Glad of the opportunity, Mrs. Kelly drew off the ragged little jacket, turned back the under-garment scarcely lighter-coloured, and bestowed upon the poor little body a thorough ablution, making the business so pleasant that several times Willie's merry laugh rang out and reached Lucy, making her wonder. At length she rose, and timidly finding her way to them, saw the final swilling and rubbing, and consented to have her face and hands also submitted to the cleansing process and the rough hair combed into order.

"There, that's something like," observed Mrs. Kelly. "Clean faces and clean hearts is good for everybody. Now if I'd only——" She stopped with a sigh, then took out a bunch of keys, unlocked the lowest of the brightly-polished mahogany drawers, and chose two holland pinafores. "There, put that on, child," she said, beckoning Lucy to her and commencing to draw the strings; "it was my own Lucy's once." Then turning to Willie, she busied herself with putting another round him, and just as this was finished, Mr. Kelly and Bernard came in.

A sudden shyness seemed to have seized the three children, and during dinner Mr. and Mrs. Kelly had to keep up the conversation. But when the table was cleared, and Willie stationed on Mr. Kelly's knee to watch the canary, whose cage was now lifted down on to the

dresser, Bernard began to show his own happy, genial disposition, and very soon the two boys were heartily interested in each other.

Willie was delighted with Spry, as Bernard called the pretty yellow bird, and his delight rose to ecstasy when the feathered songster suddenly hopped out and settled on his finger.

"Oh, do see, he likes me—he's come on my finger. Isn't he nice? I do wish I had one of my very own."

"You couldn't buy it seed," said Lucy, for the first time speaking, out of the corner where she had again ensconced herself. "We'll have nothin' to eat ourselves soon, let alone keeping birds."

Willie had forgotten all his troubles in his present comfort, but now he reached forward till he could just touch his sister's cheek, and patting it softly, said—

"Never mind, Lu, we'll do some way, won't we? P'raps the shop 'll keep us."

A very unlikely "perhaps," as they soon found, for at the end of the first week they had drawn but little, and the stock was getting low. Moreover, custom could not be expected to be even as good as this every week, for curiosity had brought most of these customers, and Lucy's reserve on the subject of the fight and its consequences disappointed and annoyed them.

DAISY BANK; OR, SISTER ELLEN'S MINISTRY.

By J. CAPES STORY.

CHAPTER V.—MR. NORLAN.

"**T**HINK that name belongs to me," repeated the strange figure which thus suddenly came into view from the bottom of the pew.

"My respects to you, young ladies, and young gentleman. Yes, I believe the name is mine; leastways, I've always answered to it, and sartinly it suits me as well as t'old fellar as first was called by it. I think I've never told you before about my name, have I, Miss Walton?"

"I think not, Mr. Norlan."

"Well, then, I can afford to chat a minute or two just to rest myself; so I'll tell you now."

"They do say as how my poor forefathers, as lived in the far north country long years ago, were robbed of the bit of land they tilled, and never got it back again; and how they got the name of 'no-land' on account of this, which stuck to their children after them. It's true the names got altered a bit; for there's a letter gone from the end, and a strange one, that's no business there, put in the

middle ; but it means all the same. We've no land yet, and not likely to have. However, that never was a trouble to me, for I was a thinking when you found me a scrubbing here what a happy old man I was. But I must ask pardon, Miss Walton, of your lady friend for beginning in this thoughtless way to talk about myself."

"Nay, nay, sir ; not at all," said Minnie ; though, to confess the truth, she was a little puzzled with the man.

"Well, as to Master Richie here, he knows me pretty well, and I need not trouble myself about him."

"And my friend Miss Maylow will be as glad to listen to you as we are, Mr. Norlan ; go on, and tell us why you feel so happy to-day."

"Well, d'y'e see, for one thing, while my brush was working on this side, there was my daughter's brush going on that side, and it was a kind of fancy of mine that they made good music together.

"You know they call her Miriam—Miriam Norlan—and I sometimes think if she'd been with her namesake that day on t'other side of the Red Sea, she'd a' made as good a clatter with her timbrel as any of the women there. However that may be, I'm sure there was music in her scrubbing just now, whether it was in both together or not ; and one as can make music with a scrubbing-brush ought to get on well, I reckon, with a better instrument. I think I shall ask the organist to let her try the organ some day."

"I think there is music of some sort in all useful work," Ellen ventured to remark.

"Just so, Miss Walton ; that's what I felt myself a going to say—leastways, it's what many a time I've thought."

"For instance," said Ellen, "I've thought there was grand music sometimes at my father's mill in the whirl and clatter of the machinery, all working so perfectly and keeping such 'good time' ; it was real harmony ; and I suppose harmony is music."

"Just so," replied Mr. Norlan again ; "and my mother, who was as good a Christian as ever carried a cross, used to say that when she was in Dr. Dickson's kitchen, where she was servant for many years, that when she was polishing the grate or cleaning the pans she couldn't help beginning to sing both with her voice and with her heart ; and when cook asked her why, she would say, 'I don't know, unless it be that I've got some good work to do, and am trying to do it as well as I can.' Good work is worth singing to, no matter how plain and humble it is ; and, what's more, it often seems to make one sing. But my mother used to say that there couldn't be music in anybody's heart as was doing bad work, or doing good work in a bad way. And, perhaps, that's one reason why mischievous people are so quiet about what they do."

"Then it's thankfulness for good work to do which makes you happy to-day ?" said Ellen, bringing the old man back to the point whence he had started.

"Well, yes, only that does not say all, for you see my work is extra good."

"What do you mean?" asked Ellen.

And so also asked both Minnie and Richie by their looks, if not by their words.

"Well," continued the chapel-keeper, with serious expression, "because it's work done in the house of God. I try never to forget that. I must tell you that I've loved this old place all my life, and many's the time, when my old woman was living, and the childer, too, that's dead, that I've found a refuge here. I worked at the mill in them days, and the work was often bad, the wages small, the wants of the house large, and we were sore put to it. And we used to talk and scheme for the best, my old woman and me, and sometimes we were fairly fast to know how to get the childer bread and clothes. And then I used to say, 'Never mind, lass, I'll tell the Lord about it, and it'll all come right, you'll see.' And on a Sunday morning I'd often be here before the doors were open, and when they were opened I'd go quietly to my place. And I'd sit, and think, and pray, and tell all my thoughts to God, all alone in this Bethesda. And you may say it was fancy, but it was real enough to me; I'm sure the Lord spoke comfortable words to me, and made me trustful and glad. The good people we read of in the Psalm 'looked unto Him and were lightened, and their faces were not ashamed;' and I think that's how it was with me. And in this way I'd many a time have a good service to myself before the reg'lar service begun."

"Indeed, you seem to have good reason for liking to work here," said Ellen.

"Truly I have," said the old man; "and the dear place got dearer still to me as the years went by. And I think I never was so glad in my life as when, long after the time I've told you about, they asked me to take charge of it. My old woman was dead, and the childer, too—all but Miriam, and she was growing up a useful lass. And they said to me, 'Norlan, don't you think you could do this work?' And I said, 'With my daughter Miriam, I'd be glad to try.' For I think I can beat him as said that he'd rather be a doorkeeper in the house of his God than dwell in the tents of wickedness. As for the tents of wickedness, I'm glad to say I never did go inside them; I see enough from the outside to satisfy me. But the Psalmist seems to say that he would be content to be a doorkeeper if he couldn't get a better job in the sanctuary, though maybe he thought himself better fitted to be the minister, as no doubt he was. But I say I'd rather be doorkeeper than anything else, for that's what suits me best. And when the work was given me I said I'd be one of the best chapel-keepers in the country, with my daughter Miriam to help me."

"And I think you've succeeded well," said Ellen, kindly.

"Well, Miss Walton, in them times I've been talking to you about we had room in our house for many things that we never got; but there was one thing we never would find room for, and that

dirt. Sometimes I used to say to my old woman that she washed and scoured to such a degree that she wore the things out sooner than they would have been; but she always said that she didn't care so that what was left was clean. And I think my daughter Miriam is her mother again, every bit."

Miriam had kept on working while her father rested himself, and the swish and whirr of her brush on the other side of the gallery seemed to add emphasis to her father's words.

"It's a very old-fashioned notion," continued Mr. Norlan, "that about cleanliness being so near akin to godliness, and I've a deal of faith in it; and if cleanliness will help the people as come here every week to get along to godliness, my daughter Miriam and me'll give them all the help we can."

And the swish and whirr of the brush seemed to say "we will, we will."

"And that brings me again to the very thing that we began to talk about a few minutes since, what makes me so happy to-day."

"Ah, yes, Mr. Norlan, what makes you so happy to-day?" said Ellen, once again.

"It was the thought of the good work done in such a good place, this dear old Bethesda, which I never forget is one of the temples of God; but it was this besides, that, may be, by keeping the place clean and tidy we might really be helping the minister to help the people to be themselves clean in their thoughts and pure in their lives, as good people often say, 'Just what God would have them be.'"

When Ellen had given the message to Mr. Norlan which was the purpose of her errand, and when she had exchanged a kind word with Miriam, they bid each other good afternoon. And in a moment more the old man was down in the bottom of the pew scrubbing away more vigorously than ever.

CHAPTER VI.—BY THE RIVERSIDE.

THERE is a strong love of adventure in our English character. The spirit of our rough-and-ready Saxon and Danish forefathers, who in early times made the foaming wave their home, does not cease to assert itself even in these settled and peaceful days.

Drake and Raleigh were worthy descendants of Hengist and Cella, and the brave men who man our ships to-day honourably sustain the naval reputation of our race.

Remembering the past, we need not be surprised that in so many of our families there rise up sons who are not content to walk the limited rounds of business life at home, and who long for the wider and more perilous experiences of those who venture upon the sea.

Nevertheless, it is seldom that this spirit shows itself among our youths without exciting anxiety. We like to keep our loved ones near us, and, generally speaking, would rather that the naval

supremacy of the country be maintained by other sons than our own.

The anxiety of which we have spoken had been felt at Daisy Bank for some time. Harry and his friend, Dick Waring—already mentioned in this story—had been schoolfellows, and now shared the desire to brave the dangers of the sea.

It is true that Dick's parents had to some extent lost their solicitude in reference to him, and were beginning to be thankful that he, with his careless, almost shiftless, disposition was likely to find some definite employment at last.

With Harry's parents it was otherwise.

Harry had fine business parts, and, had he applied himself, he might have succeeded at home even better than his father had. A position was already made for him. As the eldest son it was most fitting that he should succeed to his father's business, and it had long been Mr. Walton's cherished anticipation that some day he would be able to give up all into his hands. But it has already been intimated that Harry did not agree to this. The work of the counting-house was distasteful to him; he could do it, and did do it as a rule, but he had no interest in it; his thoughts went roaming through the world. Though of late he had said but little, yet his desire had frequently been mentioned, but only to bring a dark shade, almost a frown, upon his father's face, and a sharp pain to his mother's heart. What was Harry to do? He had one true counsellor; he would apply to her.

Not far from Daisy Bank there was a wood, the remains of what was once an immense forest. Through the wood was a pleasant path which led at last to the river's bank, and then on for a mile or more by the riverside amid a quiet scene of meadow and corn-fields, with here and there a farmhouse in view. An inviting direction this for a summer's evening walk.

"Ellen it's a fine evening," said Harry one day when he had finished his work; "can you put on your things and have a stroll with me?"

Ellen was seated by the couch of her invalid brother Joe, and had just finished reading to him.

"With pleasure, Harry, if Joe can spare me now?"

"Yes, of course, with Joe's permission."

"Oh, certainly sister, I have had more than my share of your company to-day, and you have not been out at all."

Joe lifted his wan face a few inches from the pillow, and Ellen stooped to give him the desired kiss. A little time after she was blithely walking along the path through the wood, Harry being by her side. The slanting rays of the setting sun here and there pierced the thick shade of the trees, and dappled the ground with patches of light; the ferns waved gracefully their feathery sprays; there was the hum of insects and the evening carol of birds. Tip, who had followed his master, went rushing among the undergrowth, and came springing

back again, only to set out afresh for another run. The evening was one of the most cheerful, and Ellen's heart could only dance and sing. Not so with Harry. He seemed unconscious of the joy around him. He was silent and sad.

"Why, Harry, how strange you seem! What ails you?"

"Well, I am troubled, Ellen." And Ellen was instantly troubled too.

"I asked you to come out this evening that I might tell you what's in my mind, and seek your advice. I think I never felt so perplexed as I do to-day.

"Come, then, tell it all to thy sister," said Ellen, tenderly.

"It is only the old trouble," said Harry.

"Indeed! I had hoped from your silence of late that you had resolved to give up your thought of going away. I thought you seemed more attentive to business, and more—what shall I say?—well, interested in all at home."

"I know what you mean, Ellen."

"Do you?"

"Yes."

A glance between the two showed that they understood one another.

"Oh, Ellen, I'm so miserable!"

"Well, tell me, brother, all you wish to tell. It will relieve you."

"First of all," said Harry, "I upbraid myself that I should think of leaving home at all. Look at this pretty scene! Why is it not enough for me? And yet, Ellen, I have such a longing to get away from it. I have one of the best homes and some of the best friends; why do I want to leave them? I know father has intended all along that I should have the business, and you, Ellen, don't know as well as I know how hard he has worked, and does work still, to make the business what it is. What an ungrateful wretch I do seem not to fall in gladly with my father's wishes! And yet I hate the business, and though I try my best to do my work, oh, it is such a burden to me! You remember the eagle we once saw at the show chained to its perch? I feel like that. I would fly away so gladly if I might. Ellen, is it not very wrong of me to wish to go away?"

"I think not, Harry."

"And leave father and mother, and brothers and sisters, and—well, everybody?"

"I don't think you wish to leave us. It is simply that the following of your inclination as to your life's career will require that."

"Oh, thank you, sister, that's just it. I am sure it will be the greatest pain to me to leave you all."

"I know it will; but I want to know, Harry, if you are quite sure that you choose the sea for an honourable calling, and not simply to have a voyage of sight-seeing? You ought not to put father to the loss of your services, and the expense of your outfit, only that you may enjoy a long summer holiday."

"I have thought of that, Ellen, and am sure that I don't desire this

course merely for the pleasure of it. I wish just to begin at the beginning as an ordinary sailor, and I know already, from reading and inquiry, much of the hard work, and plain fare, and frequent peril, which must be my lot. I think I have counted the cost to myself, Ellen, and am ready to pay it; but there is also the cost to father and mother and you all in letting me go. Am I right in asking you to bear it? I am sure I do it reluctantly."

"Yes, I think you are. If it be your wish you are right in asking for it, though I do not deny that the cost to us all will be heavy, so heavy that I fear, though some of us may be willing, father will not consent."

"Ah, now you come to a serious point! I fear the same. You have seen how father has met every hint of my desire which I have given. He has not listened to it for a moment. Indeed, the mention of it has made him so angry that of late I have said nothing. Ellen, I feel I must ask father to let me go now; what must I do if he refuses?"

"For the present you must stay at home."

"Must I, really?"

"Yes, decidedly."

"I don't think I can do that."

"I say again, Harry, *you must*. Simple duty demands that. Father at present has the right to decide for us, just because he is our father. If we honour him we shall submit to his decisions, however much we may think them hard, severe, or even unkind. If father refuse this request, he will do so believing it to be the best for you; and even if that were not so, I still believe you ought to submit at present."

"What do you mean by at 'present'?"

"Well, until you are of age; then you will be free to act for yourself."

"Ellen, I know you are right, and yet I fear I shall run away."

"Run away! A brother of mine run away! Nay, nay, that you shall not do. Come, the sun is set, the air is chill, Tip is tired, and, to judge from your talk, it is time we sought again our own dear home."

PAPERS FOR THOUGHTFUL BOYS.

By THOS. STONELEY.

XIV.—ARTS AND SCIENCES.—PRINTING.



THE art of printing consists in producing impressions from projecting or indented surfaces, by smearing the projecting parts or filling the indented markings with ink. There are three kinds of printing, namely, letter-press, lithographic, and copper-plate. Of these three kinds the former is the more popular, and it is of this, there-

fore, that we shall treat.

Of the processes of printing now in operation we shall speak presently, but let us first look at

ITS DISCOVERY AND GRADUAL PROGRESS.

Like all great inventions, printing was no sudden conception of genius, but the result of what may be called a gradual series of causes.

Printing with movable types was the natural outcome of printing with blocks of wood. It is said that "block printing" was practised in England as early as the close of the fourteenth century, when packs of playing cards were produced from engraved wooden blocks. Soon after this "block-books," that is, books, each page of which was cut on a single block, were printed on the Continent, the earliest of which bears date 1423. About the same time appeared the *Biblia Pauperum*, or Book for the Poor, printed from blocks between 1420 and 1430. These block-books were followed by others in which no illustrations appeared, but in which the entire page was occupied with reading. An easy book on grammar was thus printed, or engraved, enabling copies of it to be sold at a much cheaper rate than when produced in manuscript. Thus we see that the art of printing, or rather engraving on wood, has within a few years advanced from the production of a single figure, with merely a few words beneath it, to the impression of whole pages of text. The next step was substituting movable letters, wedged together, for the engraved page, and producing impressions by the swift and powerful action of the press, instead of by the slow and tedious process of friction.

The idea of printing with movable types was first conceived by John Gutenberg in 1436. Gutenberg, though a native of Mentz, in Germany, was then residing at Strasburg. He obtained his livelihood by cutting precious stones. How he was induced to direct his attention towards this object, and under what circumstances he began his experiments, it is impossible to state. By a comparison of various authorities we are enabled to present a goodly number of interesting details in connection with the great invention.

Let us, therefore, take a peep at the first printer, working in seclusion and solitude in the old historic city of Strasburg, and endeavouring to elaborate in practice the grand idea which has been conceived and matured by his energetic brain. Shutting himself up in his own room, seeing no one, rarely crossing the threshold, allowing himself hardly any repose, he set himself to work out the plan he had formed. With a knife and some pieces of wood he constructed a set of movable types, on the face of each of which a letter of the alphabet was carved in relief. These he strung together, in the order of words and sentences, upon a piece of wire, and by means of them succeeded in producing upon parchment a very satisfactory impression. To be out of the way of prying eyes, he took up his quarters in the ruins of the old monastery of St. Arbogaste, outside the town; and the better to mask his designs, as well as to procure

the funds necessary for his experiments, he set up as a sort of artificer in jewellery and metal-work, setting and polishing precious stones, and preparing Venetian glass for mirrors, which he afterwards mounted in frames of metal and carved wood. These labours he openly practised, along with a couple of assistants, in a public part of the monastery. But in the depths of the cloisters, in a dark secluded spot, he fitted up a little cell as the hiding-place of his secret operations; and there, secured by bolts and bars, and a thick oaken door, against any intrusion, he applied himself to his great work. He quickly perceived the superiority of letters of metal over those of wood. He invented various coloured inks for printing with; brushes and rollers for transferring the ink to the face of the types; "formes" or "chases" for keeping together the types arranged in pages; and a press for bringing the inked types and the paper in contact. Day and night, whenever he could spare an instant from his professional occupations, he devoted himself to the development of his great design. At night he could hardly sleep for thinking of it, and his hasty snatches of slumber were disturbed by agitating dreams.

Gutenberg had scarcely completed his printing press, and got it into working order, when the jealousy and distrust of his associates in the nominal business he carried on brought him into trouble with the authorities of Strasburg. He could have saved himself by the disclosure of all the secrets of his invention; but this he refused. Hence his goods were confiscated, and he returned penniless, with a heavy heart, to his native town, Mentz. Here he was joined by John Faust, a wealthy goldsmith, and Peter Schæffer, a scribe, and they opened a printing office. The advantages of this union were manifested in the superiority of their subsequent work; Faust having a practical knowledge of working in metals, and Schæffer having acquired some taste as an illuminator of MSS. then in use. Gutenberg's imperfect types, which were merely cut out of single pieces of wood or metal, soon gave place to the beautiful types of Schæffer, to whom the entire honour of this invention is attributed and allowed. Printing now began to advance rapidly, both in neatness and beauty. The partners of Gutenberg did not long continue with him, as Faust and Schæffer began another establishment. This, perhaps, may have tended to stimulate the exertion of each to raise his own to the highest eminence of public favour.

Hitherto the mysteries of the art were confined to the city of Mentz, where perhaps they might have remained much longer had not the capture of the city by Adolphus of Nassau, in 1462, interrupted the schemes and labours of the inventors and their workmen. Distracted at home, they were induced to seek refuge in other States, and thus the knowledge of the art became, in time, diffused throughout the whole civilised world. Faust, settling in Paris, died full of years of the plague in 1466, while Gutenberg, who had declined business a few years previously, survived Faust two years, and died

in February, 1468. Schæffer, surviving both, continued to carry on his business, and had the meanness to arrogate to himself and his family the entire invention of the art of printing. In conjunction with Conrad Henlif, he published many works till 1502, when it is supposed he died.

The honour of introducing the art into England is ascribed to William Caxton. The precise date of its introduction has not been ascertained, notwithstanding the labour and research of those authors who have made the subject their special study. In fact, all that we know concerning the early history of printing in this country is derived from Caxton's own remarks, forming the preface to a few of his printed books, most of which, however, were issued without any clue to the date of their production. The first English book, or more correctly the first book printed in English, was "The Recuyell of the Historyes of Troye," which was translated by Caxton in 1471, but was issued without any date of printing. This was followed by "The Game and Playe of the Chesse, fynyshe the last day of Marche the yer of our lord god, a. thousand foure honderd and lxxviii." These two books were printed in English at Bruges, the first book printed with a date in England being the "Dioces and Sayinges of the Philosophers, enprynted by me, William Caxton, at Westmestre, the yere of our Lord mccccxxi;" The "Booke of the Chesse," bearing the date 1474 as the time of the completion of the translation, and the first English book mentioned above, having probably been printed in that year, may be the ground of the popular belief that the art was introduced into England by Caxton in 1474.

From this time the art has gradually extended throughout the kingdom, while the inventive genius of succeeding generations has assisted to improve its character and utility. For though it had in a few years arrived at full maturity, and left but little room for improvement in casting types, the superiority of the presses now in use over those of the earlier printers is too manifest to need comparison. The printing machine also, for expedition, is an invaluable acquisition, and gives the art facilities for diffusing information which it never before possessed. Thus much on the history of printing; we will now look at the

PRESENT PROCESSES.

In order to this, we must visit the printing office. We will first look at the compositor arranging the type. He stands before a pair of cases raised on a frame about as high as his breast—the lower case slanting a little upwards, and the upper case standing beyond the lower at an angle of some fifty degrees. In the lower case are contained the smaller letters, combinations of letters, signs of punctuation, and the spaces that divide the words. The upper case contains the capital letters, small capitals, figures, accented vowels, signs of reference, &c. In the latter the letters are arranged alphabetically, but in the former those most wanted are placed nearest the

hand of the workman that he may seize them the quicker. You will see that the compositor has his copy on the right hand of the upper case, where his eye can easily catch it. In his left hand he holds the composing-stick, an implement adapted for the reception of the type, and fixed at the required width of the line. The stick is grasped in the left hand, the thumb only being inserted within it for the reception of each letter as it is lifted into its place by the forefinger and thumb of the right hand. A good compositor will pick up over two thousand types in an hour. As he works so rapidly it is evident the compositor cannot read the letters as he takes them up; in fact, he does not attempt that. The letters, which are small, inch-long pieces of metal, are each marked with one or more "nicks" or notches on their fronts; all he has to see is that, lifting the right letters, he ranges all these nicks or notches outwards. When the compositor has picked up words enough for a line, he finds almost invariably that he has room to spare for a letter or two more, or that he wants room to get in a single letter to complete a word. Now ensues a process which is called "spacing." If the line is too short, additional or thicker spaces are inserted between the words; if one or two letters have to be got in, the spaces already inserted are exchanged for thinner ones, to make room for them.

The composing-stick holds about a dozen lines of type of the size used for this JUVENILE INSTRUCTOR; when it is filled the contents are removed to a "galley," which is a long flat board, with a guard at the head and sides. From this galley the type is made up into pages, and each page, tied round temporarily with twine, is removed to a flat table of stone or iron, and arranged in proper order. This done, a "chase" or iron frame is placed round them; "furniture" of wood or metal divides the pages, and secures them in their proper position; tapering side and foot pieces are laid on the outer side of the pages; each page is carefully released from its band of twine; and by means of small quoins or wedges of wood, a "shooting-stick," and a mallet, the whole is wedged firmly into a compact mass. This mass is called the printer's "forme." The next step is to take it to the press, and fasten it in the centre of the press-table and platten, so that the piston, to which the platten is screwed, will fall perfectly in the centre of the forme when the bar handle is pulled; it is then rolled over with a roller smeared with printing ink; this roller is coated with an elastic substance made of glue and treacle, and resembling india-rubber; it is worked to and fro on the "inking table" (a smooth iron slab with a receptacle for ink) in order that the ink may be evenly distributed over its surface. The ink, being rolled over the type, covers and adheres to the surface of the projecting parts; the paper is placed on a frame, turning upon a hinge, called the tympan—a square iron framework covered with stretched parchment and backed by an inner tympan of like structure—the two retaining a blanket between them. Attached by hinges to the top of the tympan is the frisket, another thin framework of iron, crossed with threads of twine, the use

of which is to keep the sheet in its place, and to lift it from the type after printing. The frisket and tympan are both, by a species of sleight-of-hand, laid down on the forme at once, the forme is rolled in by the left hand of the workman, who, the moment it reaches the right point, pulls down the platten upon it by a smart touch of the lever, raises it again by releasing the handle, rolls out the forme, lifts the tympan and frisket, and transfers the printed sheet to his bank. This process, of course, can be repeated to any extent, and as many impressions produced as may be required. Press-work may be performed single-handed, but is generally effected by two companions, one of whom supplies the forme with ink, while the other produces the impressions, at the rate of about 300 per hour.

Printing is now in very many cases done by machinery worked by steam-power, so that a very large number of impressions can be produced in a very short time. The necessity for rapid printing, first urgently felt by the proprietors of the *Times* newspaper, may be said to have originated the first printing machine, which was invented by M. Kanig, a clock-maker from Saxony, and began its work at the *Times* office on the 28th of November, 1814. Since then various improvements have rapidly followed. The most perfect machine up to the present is known as the "Walter Press"—so called in compliment to the enterprise and perseverance of Mr. Walter, by whom it was introduced. The *Times* is now printed by it. It is indeed a triumph of mechanical ingenuity. A web of tightly-rolled paper, in the form in which it leaves the paper-mill, fully four miles in length, and weighing nearly 670 pounds, is placed at one end of the machine; in the process of unreeling it is damped, is printed first on one side and then on the other with a truly marvellous accuracy, is cut into sheets, and delivered at the rate of fully 12,000 perfected copies per hour at the other end of the machine.

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

III.—TIME AND OPPORTUNITY.

"Opportunity is the flower of time."



T IS curious to notice how many proverbs there are in common use referring to this momentous question of time. Some of these proverbs are brimful of sound wisdom, and are often pressed into valuable service. Some of these proverbs contain dangerous elements, and are often injudiciously applied. Time and opportunity are not exactly alike. Opportunity is not simply time; it is fitting, convenient, appropriate time for the accomplishment of life's noble

mission. "Time is the stalk, opportunity is the flower." The stalk may remain long after the flower has perished. Opportunity is the cream of time, and many allow Satan and the world to take off the cream of their being, and give to God the poor skim milk. Time is the ocean—deep, wide, measureless; opportunity is the flowing tide which bears the vessel into the port of plenty and repose. Few proverbs are oftener quoted than this, "It is better late than never." Sometimes it is, but not always. Repentance at the eleventh hour is better than no repentance at all. The prayer of a *dying* thief was infinitely better than no prayer at all. But in some matters it is quite true to say, "As good never as late." The signal that is hoisted after the train is dashed to atoms and the passengers are maimed and killed might as well never have been hoisted at all. The food that is sent to the orphan child after it is dead might as well never have been sent at all. In many instances it is quite true that "Slow help is no help." Equally true is it that "He gives twice who gives in a trice." To all who are in the habit of delaying to do good when it is in the power of their hand to do it, we would commend this proverb, "The street of by-and-by leads to the house of never." When Spain was a mighty empire feeble nations looked to her for help, but looked in vain; and out of their bitter disappointment grew this proverb, "The succours of Spain come late or never."

Among the precious things written by Dr. Guthrie there is this one:—"If you have any thought or wish to do a mean, cruel, base thing don't do it—at least, don't do it *now*; but if you have a purpose or wish to do a generous, noble, beautiful deed, do it, and do it *now*." We often hear people say that "All is well that ends well." I am not sure of that—in fact, I am sure of the very contrary. The good ending does not undo the bad beginning or the evil continuance. The bad may be forgiven—thank God for that—but to the end of time, and through all eternity, that badness will remain a solemn fact. In this proverb there may be some grains of truth, but there are many bushels of falsehood. Instead of saying all is well that ends well, let us say, "Well begun is half done." A good start is half the race in life. Akin to the misleading proverb we have just noticed is this, "It is never too late to mend."

Yes; but it is too late to mend in some cases. A man may go so far, and sink so low, that he has no wish to return no power to rise to a state of purity; he may become such an utter slave to drink or gambling, or vice, or greed, that all moral vigour shall have left him, all sensibility to virtue shall be crushed, all holy life-sap shall be consumed; he may go so near to the terrible rapids of perdition that he shall have no power to turn and breathe even a short sharp prayer for help.

Surely the bitterest prayer a man can utter is the prayer which brings this sad reply, "Too late, too late, ye cannot enter now." How familiar to us is the proverb that "The way to hell is paved with good intentions." Is it not a thousand pities that such excellent

material should pave the way to such a dreadful place? Far better would it be to pluck up the stones of that pavement and hurl them at Satan's head, with an aim as cool, and a purpose as resolute, as the shepherd boy flung the stones at the head of Goliath.

"If we neglect time, time will neglect us." If we do our duty faithfully "time will be on our side," and victory will be our reward. The moments are grains of good seed, and if we will we can scatter them freely on the broad, open fields of virtue, intelligence, and charity. The moments are coins more precious than gold, and if we will we may invest them where they will bring large interest and lasting joy. The moments are pages, and if we will we may write on them pure thoughts, saintly dispositions, noble deeds. "If ye know these things happy are ye if ye do them." "Whatsoever thy hand findeth to do, do it with thy might."

"Wake, thou that sleepest in enchanted bowers,
Lest these lost years should haunt thee on the night
When death is waiting for thy numbered hours
To take their swift and everlasting flight;
Wake, ere this earth-born charm unnerve thee quite,
And be thy thoughts to work divine addressed;
Do something, do it soon, with all thy might;
An angel's wing would droop if long at rest,
And God Himself inactive were no longer blessed."

"Procrastination is the thief of time," and there are few thieves more busy and successful. Don't let us be such utter fools as to stand with eyes wide open, and allow this thief to run away with hours and days which ought to be to us of priceless value. A little energy wisely expended to-day may be more productive of true dignity and bliss than enormous energy laboriously expended in days to come. In relation to the fine and imperishable robes of the spirit in relation to the poor garments of the body, it is true that "A stitch in time saves nine." There are broken threads of devotion, tiny rents of temper, little ruptures in our friendships, that may be mended by timely and kindly attention. That youth who has only just left the school may be more easily restored to-day than in years to come. The way back to the class meeting and the Throne of Grace will not seem so strange if we go *at once*. The sins of the past may all be forgiven if we repent *at once*. *This is the most convenient season. Now is the accepted time.*

Bending from His throne of light and mercy, Jesus is now saying, tenderly and beseechingly, "Come unto me, come for all things are now ready." "To-day if ye will hear His voice."

BIBLE QUESTIONS.

1. WHAT is to be paid to God only?
2. He who foretold a famine, which came to pass in the time of Claudius Cæsar.

3. In what place did the Israelites murmur and were punished?
4. An emblem of the destruction of Jerusalem.
5. The prophet that reproved Asa.
6. He who killed a giant.
7. He who was cured of leprosy.
8. A name given to Laish.
9. The king of Assyria that invaded the kingdom of Israel.
10. Who received the spies sent by Joshua?
11. He who was put to death by Samuel.
12. A prophetic emblem.

The initials of the answers form an injunction of Christ to one of His disciples.

OUR PRIZES.



WE had hoped to have announced last month the names of the successful competitors for our prizes, and also have enclosed the books in the ministers' parcels. We were prevented doing this by personal and domestic affliction. The personal affliction a kind Providence has removed by granting renewed health. The domestic is ended, in equal kindness our *faith* tells us, by the beloved afflicted one being removed to the land where the inhabitant never says, I am sick. In these circumstances we are sure all our young friends interested will forgive us for the suspense in which we have kept them, and the disappointment they would feel when the February INSTRUCTOR came into their hands.

We cannot this time adjudicate on the respective merits of the competitors as we have done in previous years by giving the number of questions they have correctly answered. In addition to the questions answered we have had a selection from the Scriptures of the names given in them to Christ, and also the biographies of the three Johns and the seven Marys mentioned in the Bible. Some of the selections of Christ's titles were very good, and also written out in a beautiful hand. We may say the same of the biographies; several of them showed a facility of composition on the part of the writers which both surprised and pleased us.

According to our announcement we have to award twenty prizes, ten to those who are above twelve years old, and ten to those who are below that age. Of this latter class there are not ten who have successfully competed. Some who began at the commencement of the year, and began well, did not persevere beyond a few months. The loss here will be the gain of the older competitors, as we shall give the twenty prizes. Indeed, we award more than twenty, for there are several so equal in merit that we find it difficult to draw the line between them; hence the following list will be found to contain twenty-six names. We give them in alphabetical order:—

John H. Brown, Nottingham; John C. H. Bevington, Clay

Cross ; Mary A. Candelet, Southport ; John Chadwick, Stourbridge ; John Downes, Sutton, Macclesfield ; Mary Daniel, St. Ives ; Willis Eadon, Sheffield ; Lillie Faull, St. Ives ; William Faull, St. Ives ; Josiah W. Hardy, Stapleford, Nottingham ; William Hodge, Queen's Ferry ; William H. Irvine, Sunderland ; Jennie Icke, Shrewsbury ; Robert Kyle, Alnwick ; John H. Lewis, Kate's Hill, Dudley ; Tinsley Lindley, Nottingham ; R. H. Mediercraft, Nottingham ; Frank Meldrum, Chester ; Emily Orme, Bermondsey, London ; Elam Plackett, Breaston, Derby ; Alfred Pike, Southwark, London ; James Parsons, Blackheath, Oldbury ; Ada L. Raybould, Pensnett, Dudley ; Mary J. Skelding, Quarry Bank, Stourbridge ; William P. Thompson, Great Dover Road, London ; Benjamin Worth, Stalybridge.

We adjudicate these prizes with some degree of pain as well as pleasure, as we fear some who have striven hard for success will be disappointed not to find their names in the list. We hope, however, they will not be too much discouraged, but try again, and, perhaps, next year may see their wish gratified.

We have one or two further remarks to make. First, we are somewhat surprised that we should have so few competitors, for we consider they are few both in relation to the circulation of the INSTRUCTOR, as well as the number of scholars in our Sunday schools. Secondly, we are surprised again at the very few places from which the answers come. From some of our largest schools we do not get a single competitor. It will give us pleasure to see it otherwise in the future.

THE EDITOR.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

MARCH.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
8 Jesus and the Samaritans	John iv. 31—42....	ver. 42.
10 The Nobleman's Son healed	John iv. 43—54....	ver. 50.
17 Jesus at Bethesda.....	John v. 1—16.....	ver. 14.
24 The Heavenly Bread.....	John vi. 22—37....	ver. 51.
31 "What think ye of Christ?"	John vii. 37—53...	Matt. xvi. 16.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FIRST QUARTER.		
8 The Wickedness of Ahaz	2 Chron. xxviii. 1-15, 2	2-25] Isa. i. 28.
10 Reformation under Hezekiah	2 Chron. xxix. 1--11, 2	7-31] xxxi. 21..
17 Hezekiah and the Assyrians	2 Chron. xxxii. 1—23	ver. 8.
24 Manasseh's Sin & Repentance	2 Chron. xxxiii. 1-19	2 Cor. vii. 10.
31 Review of the Quarter's Lessons		

APRIL.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
7 The Good Shepherd	John x. 1—16.....	ver. 11.
14 The Family at Bethany..	John xi. 1—19 ...	xv. 14.
21 The Resurrection and the Life	John xi. 25—44....	1 Thess. iv. 14.
28 Jesus Anointed.....	John xii. 1—11.....	Matt. xxvi 13.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
7 Josiah's Early Piety	2 Chron. xxxiv. 1-8,	29-38] Eccl. xii. 1.
14 The Scriptures found and searched.....	2Chron.xxxiv.14-28	John v. 39.
21 Jeremiah's Warning	Jer. xxvi. 1—16...	ver. 13.
28 The Rechabites.....	Jer. xxxv.....	ver. 15.

BETHESDA SUNDAY SCHOOL, HANLEY.—I have great pleasure in informing you that on Sabbath afternoon, December 9th, we held our half-yearly missionary meeting in the schoolrooms, presided over by our esteemed friend Mr. J. Keates. The rooms were nearly filled, which was a very desirable and gratifying thing to see. The meeting was a pleasant one, short and interesting addresses being delivered by the Revs. H. Piggin and L. Stoney and the writer. Suitable recitations were also given by Sarah Ann Bould, Lily Dale, Evelyn Dale, and Fanny Johnson. The meeting was also enlivened by singing several melodies. Praying that the great missionary work of labour may be crowned with abundant success, and kindly asking you to insert this in your next month's issue, I remain, yours very affectionately, HARRY COATES, Secretary.

ZION SCHOOL, LEEDS.—On Sunday afternoon, January 13th, we held our annual juvenile missionary meeting. The chair was occupied by Mr. Samuel Wildblood, one of our Woodhouse Lane friends, who after a short but interesting speech called upon the secretary, Mr. Richard Wood, to read the report, which showed that the children with their collecting cards had gathered a larger sum than in the previous year. The meeting was then addressed on the subject of missions by our young minister, Rev. J. Foster, Mr. John Bradford, Mr. George Walker, Mr. Joseph Walker, and Mr. Wm. Sutherland. Much interest was shown in the proceedings, and the collection was over the amount realised at our last meeting.

[In both of the above reports neither the amount of the collection at the meeting, nor the amount raised during the year, is given—an omission which detracts greatly from their interest.—EDITOR.]

SHERIFF HILL, GATSHHEAD.—According to our resolve last year (see JUVENILE INSTRUCTOR, p. 81), we made our effort to relieve Zion Chapel of its £100 debt. Owing to the great depression of trade, we soon saw that our wish could not be realised. In October our first sewing meeting was held, and all worked with a hearty goodwill. Our secretary had

again a good subscription list. Our Church friends again lent us their schools, for which we give them our warmest thanks. The day was fair, and the room was crowded; the stalls also were filled with useful and ornamental articles. Tea also was provided. The stalls were presided over by Mrs. G. Charlton, Mrs. J. Miller, Mrs. Snowdon, Mrs. R. Charlton, Mrs. D. Bradshaw, Mrs. T. Mackey, Mrs. Cook, Miss Walker, Miss Keeler, and Master W. Scott. The day's proceedings were opened by Rev. A. Hilditch giving out the New Year's hymn, reading a portion of Scripture, and offering prayer. An excellent address was also given by Councillor Joseph Hanson, a Baptist friend. The result is £50 of debt is removed from the estate; and next year we trust Zion will be free.—A. STRATTON.

Poetry.

ROBIN REDBREAST.

THE snow was falling fast without,
And I was warm within;
I thought of those who have no home
Amid the city din—
When suddenly I heard a tap
Upon the window pane;
I sat awhile and listened,
And I heard the tap again.
I lifted up the blind,
And a little Robin bold,
Was perched upon the window-sill,
Shivering with cold.
I ran and turned the key,
Dear Robin in to bring;
He hopped into the sitting room,
And then began to sing.
I went and fetched some crumbs
For the starved bird to eat,
Then he perched on the chimney-piece,
And there went fast to sleep.
I opened the window
And Robin flew away;
But ever since then has been
For his breakfast every day.
And every night he comes,
And taps upon the pane,
Only just to remind us
That he is come again.

Blyth Bridge, near Stoke-on-Trent.
January, 1878.

JESSIE FONE.



OFF TO SEA.

OFF TO SEA.



OUR engraving pictures a mother taking leave of her boy as he is going to sea. No doubt she is speaking to him words of counsel and comfort, though very likely she feels that her own heart needs comfort as well as his. It must give a mother much anxiety, and oftentimes a great deal of sorrow as well, to have a child at sea. A seafaring life is necessarily one of great hardship and peril. From such a life a mother's love would if possible spare her darling boy. But we must have sailors or we should be deprived of many of the luxuries of life, while we could not have its necessities in the abundance we now have them. What a different table we should have spread for breakfast every morning if nothing was put on it but what grew in our own country! We should be without tea and coffee and sugar certainly, while even of bread there would be but a stinted supply. And then look at our clothing! How differently we should be clad if all our garments were made of home-grown material! While, again, our industry is chiefly maintained by our commerce with countries beyond the seas.

If then a seafaring life is toilsome and hazardous, it is also very honourable. A sailor is a useful member of society, and contributes to the public good as much as the manufacturer and agriculturist. Even some boys can see this. I was once asked by a widow to go and speak with her son, who was giving her great anxiety by wishing to go to sea. He was a good lad, intelligent, studious, kind; and loving to his mother, but he had an irrepressible desire to be a sailor. His mother was heart-broken at the thought both on his and her own account. She recoiled from the thought of the hardships and dangers he would have to pass through, and it had also been her hope that her son would have been her stay and comfort in her widowhood. On conversing with the youth I found he had something to say for himself. He was able to justify the desire he cherished. A sailor, he asserted, contributed to the good of his country as much as any man. England's riches and greatness arose chiefly from her world-wide commerce, which could not be carried on if there were none to navigate her ships. This is true, and I could not but think that the impulse for a seafaring life which this boy had, though distressing to his tender-hearted mother, came from a divine source.

J. HUDSTON.

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of "A Year at School," &c., &c.*

Letter No. 93.

From BEN BARLOW to TOM BLUNT.

Waterside House, Worcester,

March 25th, 187—.

MY DEAR TOM,—

I duly received your letter, but this is the first opportunity I have had of answering it. You see I have been spending nearly all my leisure at the Infirmary with Ted. I am very pleased to say he is coming on nicely. But I must tell you how the fire happened.

You saw the "Swiss Family Robinson" father gave me at Christmas; well, I took it to school, and Ted got as much interested in it as I was, and as we could not read it much in the daytime we thought we would read it at night after we had gone to bed. But the gas is only kept lighted for a quarter of an hour after we go to the dormitories, and after that time no lights are allowed, unless one of the boys is ill and gets permission of one of the masters.

However, Ted and I thought we couldn't do much harm by reading by candle-light, so we bought a pound of dips and made a candlestick out of an empty ink-bottle, and took turns at reading aloud from my book. Of course we could not have done it if we had been sleeping in one of the larger rooms, but as we had a room to ourselves there was no one to tell tales. But we had to wait every night till Mr. Macpherson had been round before we lit our candle.

Last Thursday week it was poor Ted's turn to read aloud, and he had got the bottle holding the candle on the side of his dressing-table. I fell asleep while he was reading, and I suppose he dozed off without putting out the light. The next I heard of it was the alarm of fire and the sight of poor Ted's bed all in flames. The candle must have burned down and down until the flame reached the paper that fitted it into the bottle, and the burning paper must have dropped on the toilet-cover, and so set fire to the furniture, the flames from which at length completely surrounded Ted.

Of course I have got severely reprimanded for my share in breaking the rules. My friend Ted is, of course, sufficiently punished without any blowing-up, and I'm sure it was not needed to make me remember it. Mr. Instone came on Saturday and stayed till Monday, and my father came over on Sunday, and saw him and Dr. Tasker. The Doctor sent for me into his parlour to see them, and spoke very seriously about the terrible consequences that sometimes followed disobedience. Ted's father comforted me all he could by saying that we had no idea of doing any harm, but my father said that didn't shift the blame of the disobedience. I'm afraid Dr.

Tasker won't trust us again; he says he has been greatly disappointed with both of us.

There was one very singular thing about the affair. Who do you think first discovered the fire? It was Alfred Bowles! You see he had his suspicions that it was Ted who played him so many pranks, though he couldn't prove it. It happened that last Thursday night somebody snatched Bowles' pillow from under his head after he had gone to sleep. He couldn't see in the dark who had stolen it, but after looking all over his own room for it, it occurred to him to come to ours to see if Ted were the rogue. Of course he found the room full of smoke and raised an alarm.

It is a very queer thing that Ted and I owe our lives to the very fellow we have helped to make so miserable for the last few weeks. We both felt a bit ashamed of how we had served him, so I begged his pardon and promised to plague him no more, and Ted sent for him to the Infirmary to thank him for having been the means of saving his life. Bowles made light of the matter, but it is evident he is a great deal more comfortable and feels more at home now we are friendly to him. With kind regards believe me yours truly,

BEN BARLOW.

Letter No. 94.

From BEN BARLOW to MRS. BARLOW.

Waterside House, Worcester,

April 8th, 187—.

DEAR MOTHER,—

You will all be glad to hear that Ted Instone is sufficiently recovered to leave the Infirmary. Mr. Instone came down to-day, and he has arranged with the Doctor for Ted to go home with him on Monday and stay until after Easter.

I shall miss him very much, but the doctors think a few days' change of air and scene will do him good, and besides his mother and brothers are of course very anxious about him and want to see him. So I must bear my loss of his company as well as I can.

With love to all at home, believe me, dear mother, your affectionate son,
BEN.

Letter No. 95.

From MR. INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park, London,

April 10th, 187—.

DEAR MASTER BARLOW,—

In compliance with your request I advise you of our safe arrival here.

Ted is a little fatigued after the journey, but if his burnt hand improves as it has been doing he will be able to write to you in a few days himself.

Mrs. Instone and Ernie join Ted and myself in kind regards.
Yours respectfully, ALBERT INSTONE.

Letter No. 96.

From BEN BARLOW to TED INSTONE.

Waterside House, Worcester,
April 14th, 187—.

MY DEAR TED,—

As we have a half holiday to-day for Good Friday I thought I would write to you. I daresay you are curious to know how things are going here since you left. I am to go back to our old room to-morrow. The new furniture was put in two days ago, and I was afraid somebody else was going to have it. But the Doctor sent for me this morning, and asked me if he might trust me to keep the rules if I slept away from the masters. I promised him on my honour that I would not disobey in the future either the rules about candles or any other, so then he said I might sleep in the old room again on Saturday night.

Bowles wishes to be remembered to you. He is quite proud of our notice, I can tell you. I had a good long talk with him this morning, and advised him to take no notice of the jokes played on him, and he promised he would not. I wish he was a bit sharper. He isn't the sort of fellow one likes to be intimate with, but seeing how we treated him before, and what we owe to his discovery of the fire, I feel as if I can't help but make the best of him.

All the boys who knew I was going to write to you asked me to send their kind remembrances. Most of them have gone off for a paper chase. They wanted me to be a "hare," but I begged off.

Give my love to Ernie and kind regards to your father and mother, and believe me, my dear Ted, yours very affectionately,

BEN BARLOW.

P.S.—Which day shall you return to school? I don't wish to hurry you away from your home pleasures, but it is very lonely here now you are gone. Come as soon as you are well enough to resume your lessons.

Letter No. 97.

From CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,
April 17th, 187—.

MY DEAR BEN,—

This, being Easter Monday, is a Bank Holiday, so I have an hour's leisure to write to you. Father has gone out for the day. I fetched the letters from Hammerthorpe this morning in the trap from the "King's Arms." When I got back I asked the landlord if he

would lend me the horse for an hour. He said he had nothing at all for him to do that day except the post work ; so I called for Joe Bland, and we went a nice long drive. The country is beginning to look quite green—we got lots of violets and snowdrops in the hedgerows. I shall, of course, drive the letters to Hammerthorpe again to-night. The horse is a very fair one to go, but isn't very safe in going downhill. I think he has had a fall some time or other, though there's no mark on his knees.

I was very sorry to hear of the accident to your friend. Your father tells me he is recovering very rapidly. I was interested to hear from Tom Blunt that you owe your escape, and your friend his life, to a lad you had tormented with mock titles and all kinds of practical jokes. It is certainly a good thing for *him* that he discovered the fire, and it may be a good thing for *you* if it teaches you to be a little more merciful to dull or foolish schoolfellows. You see one never knows who may come to make a demand on one's gratitude.

If you are writing to your friend Instone express my sympathy for him and my hopes for his early recovery ; and if you can spare the time let me have one of your interesting epistles, which have of late been too much like angels' visits—few and far between.

With best wishes believe me yours, as of old,

CHARLIE THORNTON.

Letter No. 98.

FROM TED INSTONE TO BEN BARLOW.

3, Brighton Villas, Regent's Park, London,
April 17th, 187—.

DEAR BEN,—

My hand is still stiff, but I will try what I can do towards answering your letter.

I am getting on very well, and except my hand am almost all right. I think I shall return on Wednesday, all being well. I am as anxious to get back as you are to have me.

As to Bowles, we must see if we can push him along a bit. After all it isn't his fault he's such a dunce. If he hasn't many brains we can't blame him for that, and if he has brains and hasn't learnt how to use them, that is his parents' fault. We might have been just as much behind if our fathers had taken no interest in our studies.

We went to service in the Abbey yesterday morning. It was glorious! I never felt so carried away by music before. The jubilant Easter Anthem has been echoing in my head ever since. I wish you could have heard it.

I must now say "Good-bye!" My hand is already cramped, and you will see by my writing that I have held my pen quite stiffly to write at all.

All at home send kind regards, and I am your dear friend,
TED INSTONE.

Letter No. 99.

From BEN BARLOW to CHARLIE THORNTON.
Waterside House, Worcester,
April 22nd, 187—.

MY DEAR CHARLIE,—

Thanks for your letter. Ted Instone returned here on Wednesday. He is quite right now, except that his right hand is a bit weak as yet. Of course his face is very red where the blisters were, but there are no seams, and I think in a few months' time he will be looking much as he did before the fire.

You may be sure the sad affair has quietened both of us down a bit, and I daresay some others of the new boys besides Bowles will sleep all the sounder in consequence of our becoming a little more thoughtful. As Ted said, only last night, it takes no more trouble to make fellows happy than to make them uncomfortable, and there's more pleasure got from one act of kindness than from the fun of half-a-dozen practical jokes.

Now don't think from this that Ted and I have forsworn all fun. All I can promise for myself is that I will in future try to keep out of mischief.

Please excuse the shortness of this note; I'll try and make up for it next time. Your affectionate friend,
BEN BARLOW.

THE PRISONER'S CHILDREN.

By MRS. MELDRUM, Author of "NED'S SEARCH."

CHAPTER IV.—BERNARD'S CHAMPIONSHIP.



T was fortunate, indeed, for the two poor desolate children that Mrs. Kelly's attention had been drawn to their condition, for her kind heart could not close again and leave them friendless and forlorn.

In many ways they felt her influence, though of money she had but little.

It was not long before Mr. Kelly made a little four-wheeled sled on which Willie could push himself about with much greater ease than in his old painful manner.

After he had become expert in the use of this, Mr. and Mrs. Kelly one day suggested to the two boys that they should go together to school the following morning. Both their faces flushed at the proposal, Willie's with pleasure, Bernard's with hesitation and distress, while an imploring look at his mother seemed to beg her not to urge a scheme so distasteful.

Regard for Willie's feelings, however, kept him silent until the child had said good night and gone to tell Lucy of the new plan. Then he broke forth, with all the force of repressed eagerness—

"Oh, mother, I couldn't take Willie to our school; all the boys would laugh at him!"

"Would *you*, Bernie?"

"No, mother, I shouldn't, of course—I should never think of such a thing—but the others would."

"Do you mean me to think my boy is the only one with too good a heart to laugh at a poor little cripple? I'm afraid somebody thinks himself better than his neighbours, doesn't he?" said Mrs. Kelly, smiling.

"No, I don't, but see, mother, it's different with me. I know all about him and I'm sorry, but they don't know, and they'd make fun, I'm sure they would, of Willie, and me too if I was with him."

"And suppose they do laugh, what then?"

"Why——" said the boy, and paused with a doubtful face. "It wouldn't hurt me, would it?"

"Not a bit," answered his mother; "and think what a comfort it will be to Willie all his life if he learns to read and write now. He would be able to teach Lucy—she will never have time to go to school herself—and perhaps he might learn to earn a living."

"But all the way coming and going, mother, everybody will turn round to look at us."

"That would be a pity," said his mother, smiling. "A little boy like you could not stand being looked at."

"Mother, *you're* laughing at me now," said Bernard; "and I don't care who else does if you won't. I'll take Willie to-morrow, and if anybody laughs at him they may look out for themselves, that's all."

"Take care you don't err on the other side, Bernard. Here's father; we'll read now, and you shall go to bed."

And as the boy listened to the sweet story of Him who loved all men and did good to the poorest and most lowly, his reluctance melted away and his heart glowed with the thought of the protection he would give to little crippled Willie on the morrow. And when the morning dawned and Bernard rose, his first thought was of how he should make the way smooth for Willie. The child was so accustomed to his infirmity that it scarcely troubled him, and the neighbours in the little street seldom noticed him at all.

But Bernard knew it would be different amongst a crowd of schoolboys of various dispositions, and puzzled himself to devise some scheme of breaking the novelty of Willie's first appearance amongst them.

It was very common for the scholars to assemble in the playground some time before school began, and Bernard, having hastily eaten his breakfast and run down to see that Willie was preparing to accompany him, darted away and arrived at the school some twenty minutes early.

"I say, boys," he exclaimed, joining a group of his class-mates, "I want you to promise me something!"

"Well, what?" asked several voices.

"Promise me first."

"All right," they answered, with boyish disregard of possibilities.

"Well, there's a little fellow I know wants to come to school, and he's such a little crooked thing that I expect the lads—some of them that don't know better—'ll laugh at him, and I want us bigger ones to stand by him, 'cause he'll feel bad enough anyway."

"Well, that's not much to do. Where is he?"

"At home. I'm going back for him now—it's time, too," and Bernard started off, but not alone, for about twenty boys followed him helter-skelter through the streets and halted breathless before Mrs. Kelly's door.

"Come, Willie, here's a lot of the lads come to see you; are you ready?"

Yes, he was quite ready, in his clean pinafore, with his fair hair neatly brushed, a timid smile lighting up his pale pinched face, and his grey eyes anxiously glancing at his unexpected visitors.

"Now then, little man, here's your sled," and Mr. Kelly placed him carefully upon it and gave him in charge to Bernard. "Now, boys, look after him; he's but a little one, and he's more to bear than any of you knows of."

The boys made no answer, but the appeal had touched them, and from that day Willie had a body-guard of his schoolfellows, and woe befall anyone who should dare to insult or injure the helpless child!

The clock struck nine as they entered the building which served as day and Sunday school for the neighbourhood.

The conductor was already in his place, and though all eyes turned upon the new scholar not a word was spoken.

Mr. Hill's eyes also caught sight of the strange new-comer, but he had not time to speak to him till after opening the school by prayer.

Then he came round to where Willie sat, still on his sled, and seating himself bent down and asked him kindly—

"Well, are you going to begin to come to school?"

Willie managed to overcome his shyness sufficiently to stammer out—

"Please, yes, sir, Bernard said I might."

"Bernard was right—we are very glad to see you; now shake hands with me, and we shall know we are friends."

Willie smiled at the pleasant words, but having never performed the ceremony of shaking hands before, extended the left one, which Mr. Hill shook heartily, and then observed—

"Now try the other hand, and let us see which shakes the easiest."

Which the child did and said quickly—

"This one shakes best."

"I think it does, so we will always use it, shall we?"

This was Willie's first lesson at school, and he never forgot it.

Every morning the kind master came to where Willie's bright, expectant glance awaited him, and spoke a few pleasant words on which the long-neglected child feasted all the day through.

He had need of some such help, for day by day he was brought in contact as he never had been before with healthy boyhood; and as he watched their rough, active sports, and even while he laughed at their comical antics, the sad consciousness of his own state was becoming more and more a pain to him.

Occasionally also, though rarely, some mocking word or derisive gesture cast at his ungainly form would reach his ear or his eye, and after such a time it required all the persuasion of his friends to induce him to go to school the following day.

Mingling with other children was rapidly developing the warm, sensitive nature which had previously lain dormant. On his friends and champions he lavished all the warmth of affection of which he was capable, while an equal intensity of hatred commenced to manifest itself towards those whom he regarded as foes.

Two months had passed, and one morning Willie found himself for the first time obliged to go to school alone, Bernard having taken a severe cold. Slowly he pushed himself along by aid of two small wooden blocks, looking from side to side, pausing at each road till the way was clear, until at length he came in sight of the school-house.

DAISY BANK;

OR, SISTER ELLEN'S MINISTRY.

By J. CAPES STORY.

CHAPTER VII.—JIMMY JORTIN.



ABOUT ten minutes' walk from Bethesda Chapel, passing Mrs. Manley's lodging by the way, there was a part of the town which people never visited for pleasure, and as seldom as possible for business. The houses were old and dingy. They were hardly ever disturbed by the carpenter's hammer or troubled with the painter's brush.

Built in narrow streets, and still narrower courts and alleys, they swarmed with inhabitants and reeked with filth. One of the streets in this neighbourhood bore the suggestive name of Green Lane.

Whether in former days it had ever been verdant cannot be said, certainly not in the memory of living men. All the freshness of which it could boast was in the name.

At the back of Green Lane was a considerable piece of land which on some account had not been covered with solid bricks and mortar, but which was partially covered with erections of an humbler kind. Stables, cartsheds, pigsties, and buildings of a similar kind were here to be seen in every possible style of primitive architecture. A few bricks of course had been used, but the principal building material was wood. Boards of every description for walls, with tarpaulin or thatch for roofs, composed the most rickety and unsightly set of buildings which human poverty could frame. The remaining part of this land was used for a stand for carts, lorries, and barrows, and as a receptacle for rubbish of every kind.

About half-past five one Sunday evening a lad came along from his master's house in Green Lane to one of these stables. It was Jimmy Jortin. Hearing the rattling of the chain by which his master's donkey was attached to his crib, Jimmy said, as he opened the stable door—

"Well, Bosker, then yer heeard me a comin' did yer? Yes, yes, yer knew I'd come, didn't yer, old fellow? An' what sort of a day hev yer had, Bosker? S'pose you've bin middlin' comfortable; yer needed some rest after last week's work."

Bosker pricked his ears and whipped his tail in acknowledgment of his keeper's remarks.

"Eh, eh, I understand yer, an' I'm glad yer feel better. We had a hard week last week, sartin'ey we had, an' yer mun make the best of to-day, Bosker, for we shall hev to be stirrin' soon in the mornin'."

Jimmy went whistling about the stable, attending to a few little duties, and then he continued—

"There, Bosker, I think yer'll do for the present. Yer've 'ad corn enough, an' up in the rack there's as sweet a bit of hay as yer iver put yer nose to, an' down here there's a bit of clean straw to stretch yersel' upon: I think I may leave yer now."

The lad was intending to turn to the door, yet he lingered, and kept on stroking Bosker's nose, and drawing his long soft ears through his hand.

"I was just a goin', Bosker; but the fact is I don't know where. I feel kind of lost to-day."

And Jimmy threw his arm over the donkey's neck and patted him on the breast, and went on talking to him in a rambling way as though he understood every word, and if we may judge from the manner in which the animal turned his large soft eyes to his keeper we might think he did; at least, if not all, a little he surely understood.

The reason thus Jimmy stayed in the stable was that, being Sunday, after attending to the donkey's wants, he had nothing else to do, and knew of no better companionship to seek. There were scores of lads of his own age all around whom he might join and often did join, but he was not drawn to them, and certainly found no delight in their society.

Jimmy was an orphan. His parents he never knew, and had scarcely heard of them. He was now in the service of Mr. Dan Lowthorpe, costermonger, and though little over fifteen years of age he had already served an apprenticeship to the business of the streets, hawking fish, fruit, vegetables, anything indeed by which an honest shilling might be earned.

Jimmy left the stable at length, and, turning into the streets, he wandered along for a little time, not knowing whither he went.

It was approaching the time for evening worship, and when he reached the principal thoroughfares he found them thronged with people on the way to the churches and chapels of the neighbourhood.

For a little time previously dark clouds had been gathering overhead. They came in thick black masses, soon hiding the clear blue of the sky, and casting an ominous gloom over all. People looked up, and then quickened their pace to avoid the coming storm.

Jimmy thought he must turn homeward, though there was nothing to attract him there. And then there was a flash of lightning, followed immediately by a loud crash of thunder. In a moment more the rain began to fall in large drops which appeared as big as pennies upon the causeway.

Jimmy began to run. He had turned two corners in as many minutes, and was getting out of breath, when he came to a large building.

"Come in here!" called an old man who stood at the door of the building; "come in here, lad! Don't you see how the storm gathers? You'll be wet through in a minnit. What better shelter can you have?"

Jimmy simply obeyed the voice which called, and turned into the porch of Bethesda Chapel.

"If you'd like to go inside," said Mr. Norlan, for it was he who had called the lad, "I'll find you a seat, and lend you a book, and maybe the storm will be cleared when the service is over."

"May I go in?" asked Jimmy, doubtfully.

"May you? Of course you may; and glad to see you too. Come, follow me." Jimmy Jortin allowed Mr. Norlan to lead him to a seat in the sanctuary, and there sat down and stared with astonishment.

Accustomed to the busy streets of the towns as he had been all his life, familiar with the sight of churches and chapels from his earliest days, he had yet no more thought of entering them than he had of passing without leave into the large houses of the rich at whose doors he sometimes called. As in the market he saw peaches and pineapples, and sometimes wondered what the taste might be, yet never dreamed that they were for such as he to enjoy, so he had regarded these large buildings under the shadow of which he and Bosker so frequently passed, as places intended only for the use of people in a different station from his own.

Jimmy had been seated but a few moments, and was eagerly

engaged scanning every part of the chapel his eyes could reach, when the organist began in the softest strains the opening voluntary. The sounds seemed first to steal upon the soul in gentle swells and ripples like waves upon the shore on a calm summer's night, and then they rose in a majestic burst of harmony, like a mighty chorus, including voices of every kind, those which were soft and sweet being distinctly heard in the midst of the deeper and louder tones, and all wonderfully blended in one rich and full acclaim of praise.

He who thus played skilfully upon the instrument little thought how he stirred that evening the soul of a poor uncultured lad. Jimmy could only look, and listen, and wonder.

Then the congregation stood and sang, and the lad stood and tried to sing as well. The minister then said, "Let us pray," and now the poor lad thought it was time he went away. The rest of the people there no doubt understood how to pray, but he did not, not having attempted such a thing during the whole of his life. However, it did not seem practicable to get out of the chapel at that moment, so he bowed his head as the others did, and finding that the minister spoke in the name of all, he tried to follow him in the petitions he offered.

And the minister read about a Shepherd who had a sheepfold, and who knew every sheep by name, and tenderly cared for every one. And he told how some of the sheep had wilfully left the fold, and how their sin was very great; how others have been away all their lives, and do not know that they belong to the Good Shepherd at all. But by some means He is going to find them all, and then "there shall be one fold and one Shepherd." And, as the minister spoke about those "other sheep" which the Good Shepherd had, Jimmy wondered whether he could be one of these.

When the service was concluded the poor lad seized his cap, and tried to get out of the chapel and away before he was much observed by the people. For he could not avoid a strange feeling that he had no business there, and that though he had so much enjoyed the service, yet he had been taking an enjoyment never intended for him.

But Mr. Norlan was at the door, and was waiting for him, and before he went away he said—

"Now, lad, it's fair weather once more, and you're none the worse for stopping, I hope. Will you come again?"

"May I come again?" asked Jimmy.

"Why, bless my heart, I should think you may, as often as you like, and right welcome you'll be, too."

"Oh, thank you," answered Jimmy, feeling assured as he looked into the old man's loving face. "I'm sure to come. Good night, Sir."

And Jimmy Jortin hastened along the street to his home in Green Lane, like one whose steps are made light with a new joy, and whose life is inspired with a new hope.

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

IV.—FRIENDS AND COMPANIONS.

"There is a friend that sticketh closer than a brother." "A friend in need is a friend indeed."



FRIENDSHIP is not simply one of the luxuries of life, it is a necessity. Few people find it either safe or happy to stand alone. "Two are better than one." "It is not good that the man should be alone." The presence of a wise and virtuous friend makes a long journey seem short, a heavy burden feel light, a difficult task comparatively easy. True friendship gives warmth and colour and brightness to life. A blind man was once asked what the sun was like. Now, although he had never seen the sun, he had many a time felt the cheering influence of true friends, and he said that "The sun was like friendship." Certainly life owes much of its radiance and beauty to this priceless boon.

Great care is needed in the choice and treatment of companions and friends, for upon few things does our peace and purity so much depend. The history of our race supplies us with many instances of beautiful and noble friendship, and in the noblest of them we discover the following qualities:—

1, **VIRTUE.** It has been maintained by some wise men that without virtue true friendship is impossible. In most cases the bonds which bind bad men together are but ropes of sand, or twisted straws which the fires of adversity speedily consume. Virtue and religion refine friendship—take from it much that is dull and rough, just as men out of rough iron ore make fine polished steel. He who keeps company with the base and vicious will probably become like them. "He who confesses to the wolf will get the wolf's pardon and pity." "He that walketh with wise men shall be wise, but a companion of fools shall be destroyed." Spurgeon well remarks that "True friendship can only be made between true men. Hearts are the soul of honour. There can be no lasting friendship between bad men." Arnot's words are equally worthy of our attention—"Friendship sealed by companionship in sin will not last long. Friends that are glued together by the slime of their lusts will soon be torn asunder." If the base and false and cowardly seek our company let us never yield to their entreaties. "My son, if sinners entice thee, consent thou not."

2, **AFFECTION.** Without love, deep and strong, friendship is not worthy of the name. One proverb says that "Friendship is the perfection of love." It is love at its noon-tide glory. It is love putting on its richest bloom and pouring forth its sweetest fragrance.

"Friendship is the most sacred of bonds." No finer instance of this was ever witnessed than that we see in the history of Jonathan and David. What rare constancy, what clinging trust, what glowing fervour! "Jonathan strengthened David's hands in God." "The soul of Jonathan was knit to the soul of David." "He loved him as his own soul." On the other hand, David loved Jonathan with pure and impassioned affection. "David fell on his face to the ground, and bowed himself three times, they kissed one another, and wept one with another until David exceeded." This was not the tearful, hysterical sentimentality of two men who were in the habit of whining and cringing. Both of them were men of resolute purpose, of surpassing courage and energy; still they loved each other with "a love passing the love of women."

3, CONSTANCY. Nowhere is fickleness more painful or provoking than in our conduct toward those we call friends. Some are good friends until you need them. Then they fail you. Others are subject to the most surprising changes with no sufficient reason to account for them. Now they are like a sultry summer's noon—they almost stifle you with the warmth of their affection; then they are like a bleak December night—they well-nigh freeze you by their cold looks and formal phrases. If they meet you when they are in the first mood they say, in tones which almost startle you, "How are you? I'm so glad to see you! When will you come to see me? I should be so delighted if you would come soon." By-and-by you meet again, and, oh, how different the reception! With great difficulty your friend makes his lips move, and what does he say this time? Why, just three words—"How are you?"—in a tone that seems to say, "Who are you; and what are you doing here, crossing my path, daring to look into my face? Mind and not let me see you again for a long, long time." You go away, saying to yourself, "No, you sha'n't." You think yourself either a great simpleton or rogue: a simpleton for ever thinking this lump of ice your friend, or a rogue for having done some unknown crime by which you have for ever lost the love of your friend. This is no mere fancy sketch. We know men and women who act thus, and feel sure that such conduct deserves severe censure. There is much that is disagreeable and cruel in it. People don't like to have their trust and love one day invited and another day spurned as something wretched and worthless.

"Old friends and true friends,
Don't talk to me of new friends;
The old are the best, who stand the test;
Who book their names as through friends."

4, COURTESY AND CANDOUR. I name these two qualities together, not because they are always found together—often they are not, indeed it is not easy to unite them in the same character. The exceedingly courteous friend finds it hard to be quite candid. He is so anxious to please, to be agreeable and nice, so afraid of giving

offence. The extremely candid friend finds it hard to be courteous: he must be faithful, must do his duty, and speak his mind. Now, both qualities are essential to true friendship. There must be courtesy. Many worthy friends have been lost by rudeness and coldness, by too exacting demands upon their time and patience, by random tricks, foolish jests, and unwise liberties. "It is better to lose a jest than a friend." "Friends are like fiddle-strings—they must not be screwed too tight." The fault to which I refer is humorously described by Cowper in his poem on "Friendship:"—

"The man that hails you Tom or Jack,
And proves by thumps upon your back
How he esteems your merit,
Is such a friend that one had need
Be very much his friend indeed
To pardon or to bear it."

Some of these candid friends see a fault on the character like a fly on the nose, and not content to dust the fly off they give the nose an ugly knock. They thump not the back but the heart, and then hope you will not be offended because they have spoken their mind. Let us remember the words of Peter—"Love as brethren, be pitiful, be courteous." Still, let us also be thoroughly candid—"Speak the truth in love." "A friend's frown is better than a foe's smile." "Open rebuke is better than secret love." Paul withstood Peter to the face because he was to blame. If called upon to tell a friend his failings do it tenderly, discreetly; not rashly and in harsh tones. Severed friendships often occasion bitter sorrow; they give birth to many a keen pang of remorse, many a hot tear of anguish, many a weary, sleepless night. Lord Melville and Wilberforce had been fast friends, but afterwards became sadly estranged. A similar separation took place between Sir W. Hamilton and J. G. Lockhart. Let us avoid such severances as we would the rupture of a blood-vessel. The breath of suspicion will rust any friendship. Sometimes it may be necessary to give up a friend. Let even this be done thoughtfully and tenderly. Cicero gives a bit of capital advice on this point. He says, "It is better to unstitch than to tear a friendship." Concerning one of these torn and ruptured friendships Coleridge wrote these beautiful words:—

"Alas! They had been friends in youth.
But whispering tongues can poison truth;
And constancy lives in realms above;
And life is thorny; and youth is vain;
And to be wroth with one we love
Doth work like madness in the brain.
And thus it chanced, as I divine,
With Roland and Sir Leoline.
Each spoke words of high disdain
And insult to his heart's best brother.
They parted—ne'er to meet again!
But never either found another."

To free the hollow heart from paining
 They stood aloof, the scars remaining
 Like cliffs which had been rent asunder.
 A dreary sea now flows between;
 But neither heat, nor frost, nor thunder
 Shall wholly do away, I ween,
 The marks of that which once had been."

At the head of this paper part of one of Solomon's excellent proverbs is quoted; here we may fitly quote the whole—"A man that hath friends must show himself friendly, and there is a friend that sticketh closer than a brother." Such a friend is Jesus. And with His gracious friendship each one of us may be honoured. No other friend is so wise and strong, so tender and constant as Jesus. What dignity does He confer upon His followers!—"I have not called you servants, but I have called you friends." How is this matchless honour to be gained? By thorough obedience to His law. "Ye are my friends, if ye do whatsoever I command you."

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PARKER.

XXV.—BEES.



ABEEHIVE affords one of the most astonishing sights that the whole world contains. We may compare it to an immense workshop, where many thousands of labourers are busily engaged in the performance of various tasks; or to a crowded city with its teeming inhabitants. The latter is perhaps the better comparison, only that each city is an independent kingdom, and a kind of absolute monarchy in the form of government that obtains. The queen bee is the head of the state, and from her thousands of subjects she receives deference and respect that could not be excelled by the courtiers of her gracious Majesty Queen Victoria. Her subjects are divided into two classes—the working bees, who are a large majority; and the drones or males. In their city they have passages which may be compared to roads and streets; and cells which may be compared to houses, for they are at once their magazine of stores and the places where they bring up their young offspring.

In various birds and animals we have seen an anticipation of such arts as sewing, spinning, and weaving, before those useful arts were known to men. Bees build their cells with a truth and correctness which are perfect, and according to mathematical principles at which men have arrived only after ages of slow and painful improvement. In constructing habitations within a limited compass, an architect of the present day would endeavour to combine three objects—first, to use the smallest possible quantity of materials; second, to give to the

edifices, the greatest capacity the space would admit; and thirdly, so to employ the spot as that none of the room might be lost. All these advantages the bees have obtained in the six-sided form of their cells. First, there is an economy of wax, as the circumference of one cell makes part of the circumference of others near to it; next, there is economy of space, as those cells which join to one another leave no void between them: and third, there is the greatest capacity, as of all the figures which can be contiguous, that with six sides gives the largest area. To prevent any space being lost between the cells, they must either be in squares, or figures of three equal sides or of six equal sides. But either of the two former would lose space inside, for the sharp angles would make corners into which the body of the bee could not conveniently get. The six-sided shape, with its flatter corners, is more appropriate to the round body of the bee. It is also the strongest of the three; it has something of the strength of an arch, and pressure, either from without or within, will hurt it least.

The material of which the cells are built is wax, collected from various flowers. In their construction there is a beautiful example of division of labour, whereby the work is considerably expedited. The bees either have a language by which to communicate with each other, or they make signs which are understood. They divide themselves into companies, one of which is consigned to the fields to collect materials for the structure; another to work those materials to a rough state of readiness; another to adjust the angles and give the work its last finishing touch; whilst a fourth is engaged in bringing provisions to those labourers who cannot leave their work.

The body of a bee is divided by two ligatures into three portions. The head is provided with saw-like jaws, which open and shut to the right and left, and which serve instead of hands; and with a trunk, which, small as it is, can collect more honey in a day than a hundred chemists could extract in as many years. The middle part, which is called the breast, sustains the legs, which are six in number, and four wings, which serve to transport it wherever it pleases. The hinder part contains the intestines, the bag of honey, the bag of poison, and the sting. The bee's sting is like a tube wondrously fine, and it is the poison emitted through it when it pierces in self-defence that is so painful. The honey is transparent, and is composed of the sweets extracted from the flowers. A part of it remains in the bag to nourish the insect, but the largest quantity is discharged into the little cells of the magazine to supply the community in winter. The wax is obtained from herbs and flowers. The bees gather it with the hair with which their whole body is covered. They roll in the yellow dust that falls in the cups of the various flowers from the chives. Or in the case of flowers like the honeysuckle or the long foxglove, which are too narrow for them to enter, they fill up the mouth of the flower with their bodies, and suck out the air, so that the soft sides of the flower close and squeeze the dust and juice towards them as well as if pressed by the hand. The particles of wax they press into

little pellets, and then slide them one at a time into a little pocket that is conveniently placed in the thigh of their hindmost legs ; when fully loaded they immediately repair to their hive.

The honey and the wax which they supply have played a conspicuous part in history, though they are now superseded as regards their chief work. The honey was the sugar of the ancients, and the wax supplied them with the means of artificial illumination. The bee has, accordingly, been the great donor of "sweetness and light" to the past ages.

In almost every respect bees act as consistently as if they were influenced by reason itself. Just as when towns or countries have become overcrowded with population, they have sent forth the surplus people to colonise new districts ; so when a hive becomes too small for its numbers, a part of them are compelled to sally forth and seek a home for themselves elsewhere.

Their forethought in providing for the winter is known to all. But they are able to forecast the skies, and guard themselves against the danger of even sudden summer showers. To see a bee in the rain would be almost as remarkable as to see a fish climbing up a pear-tree. It is only bees who are either very infirm, or have met with accident, who are ever caught in a storm.

The drones who do not work are thrust out of the hive as winter approaches, or are stung to death. The wholesome lesson is taught in a very forcible way that those who will not work shall not eat.

Industry and perseverance are taught by the habits of the bee. Great sermons are sometimes given by little preachers, and the bees are very eloquent preachers indeed. In their structure and instincts we see as great perfection as the Deity has written on the face of the sun itself ; and in their painstaking habits my youthful friends will see a deal that is worth copying. It is to some of these things that our attention is called in that time-honoured rhyme so dear to the heart of every boy and girl :—

" How doth the busy little bee
Improve each shining hour,
And gather honey all the day
From every opening flower.

" How skilfully she builds her cell ;
How neat she spreads the wax !
And labours hard to store it well
With the sweet food she makes.

" In works of labour or of skill
I would be busy too ;
For Satan finds some mischief still
For idle hands to do.

" In books, or work, or healthful play,
Let my first years be passed,
That I may give for every day
Some good account at last."

PAPERS FOR THOUGHTFUL BOYS.

By THOS. STONELEY.

XV.—ARTS AND SCIENCES—PHOTOGRAPHY.



It is instructive to trace the progress of a discovery from its first indication to the period of its full development, and then to examine its applications to purposes of ornament or utility. The progress of discovery is ordinarily slow, and it often happens that a great fact is allowed to lie dormant for years or for ages, which, when eventually revived, is found to be of great use in explaining some of Nature's appearances, and in ministering to the wants or pleasures of existence. Of this position photography is peculiarly illustrative.

The philosophers of antiquity appear to have had their attention excited by many of the more striking characters of light ; yet we have no account of their having observed any of its chemical influences, although its action on coloured bodies must have been of every-day occurrence. The only observations which they have recorded are the doubtful ones that some precious stones, particularly the amethyst and the opal, lost their brilliancy by prolonged exposure to the rays of the sun.

The alchemists, amidst the multiplicity of their processes—in their vain search for the *philosopher's stone*—stumbled upon a peculiar combination of silver with chlorine which they called *horn-silver*. They observed that this horn-silver was blackened by light, and concluded that this change was the commencement of a process by which their dreams were to be realised. Failing, however, to produce gold from horn-silver, the fact of its blackening was simply recorded, and no further investigations were made into this remarkable phenomenon by the alchemists.

Pelit, in 1722, noticed that solutions of nitrate of potash and muriate of ammonia crystallised more readily in the light than they did in darkness.

The illustrious Scheele (1777), in an excellent work which he published, gave the world the first philosophical examination of the phenomenon of the darkening of a salt of silver previously white, and he proved the dissimilar powers of the different rays of the spectrum in effecting this change.

It has long been known that at the beginning of the present century Josiah Wedgwood, the famous potter, Sir Humphrey Davy, and James Watt made experiments upon the action of light upon nitrate of silver ; but it is only lately that evidence has been found of the fact of their having succeeded in any degree in permanently fixing the image thus obtained. Some person searching for other purposes in an old lumber-room which belonged to Watt's partner,

Matthew Boulton, discovered a silvered copper plate, having on it a representation of the old premises at Soho, which appeared to have been evidently taken by a photographic process. This plate is now included in the collection at the Museum of Patents at South Kensington. In the account published of it, it is stated that an old man of ninety, recently dead, remembers that Watt and others used to take portraits of people in a "dark room," the latter fact meaning, probably, nothing but that they were taken secretly, for there is a letter extant of Sir William Beechey, begging the philosophical body at Birmingham calling themselves the "Lunar Society," to desist from these experiments, as were the process to succeed it would ruin portrait painting.

Thomas Wedgwood was the first person who made any attempts to use the sunbeam for delineating the objects which it illuminates; it is, therefore, necessary that some particular account should be given of his processes. In 1802 he published a paper in the *Journal of the Royal Institution*, with the following title:—"An account of a method of copying paintings upon glass, and of making profiles by the agency of light upon nitrate of silver: with observations by H. Davy."

From this communication the following extracts, containing the more important particulars, are made:—

"White paper, or *white leather*, moistened with solution of nitrate of silver, undergoes no change when kept in a dark place; but on being exposed to the daylight it speedily changes colour, and after passing through different shades of gray and brown, becomes at length nearly black. The alterations of colour take place more speedily in proportion as the light is more intense. In the direct beam of the sun two or three minutes are sufficient to produce the full effect; in the shade several hours are required; and light transmitted through different coloured glasses acts upon it with different degrees of intensity. Thus it is found that red rays—or the common sunbeams, passed through red glass—have very little action upon it; yellow and green are more efficacious; but blue and violet light produce the most decided and powerful effect.

"When the shadow of any figure is thrown upon the prepared surface, the part concealed by it remains white, and the other parts speedily become dark. For copying paintings on glass, the solution should be applied on *leather*, and in this case it is more readily acted on than when paper is used. After the colour has been once fixed on the leather or paper, it cannot be removed by the application of water, or water and soap, and it is in a high degree permanent. The copy of the painting or the profile immediately after being taken must be kept in an obscure place; it may, indeed, be examined in the shade, but in this case the exposure should be only for a few minutes.

"The images formed by means of a camera obscura have been found to be too faint to produce, in any moderate time, an effect upon

the nitrate of silver. To copy these images was the first object of Mr. Wedgwood in his researches on the subject; and for this purpose he first used nitrate of silver, which was mentioned to him by a friend as a substance very sensible to the influence of light; but all his numerous experiments as to their primary end proved unsuccessful. In following these processes Davy says he has found that the images of small objects, produced by means of the solar microscope, may be copied without difficulty on prepared paper. This will probably be a useful application of the method; that it may be employed successfully, however, it is necessary that the paper be placed at but a small distance from the lens.

"In comparing the effects produced by light upon muriate of silver with those produced upon the nitrate, it seemed evident that the muriate was the more susceptible, and both were more readily acted upon when moist than when dry—a fact long ago known. Even in the twilight the colour of the moist muriate of silver, spread upon paper, slowly changed from white to faint violet, though under similar circumstances no immediate alteration was produced upon the nitrate."

From the time when the difficulty of fixing the photographs which they obtained stopped the progress of Wedgwood and Davy, no discoveries were made until 1814, when M. Niepce, of Chalons, on the Soane, appears to have directed his attention to the production of pictures by the agency of light. It does not seem that his early attempts were very successful, when, after pursuing the subject alone for ten years, he, from an accidental disclosure, became acquainted with M. Daguerre, who had been for some time endeavouring, by various chemical processes, to fix the images obtained with the camera obscura. In December, 1829, a deed of partnership was executed between M. Niepce and M. Daguerre, for mutually investigating the subject. For an account of the various processes discovered by them and their successors we must refer the young reader to one or other of the various manuals published on the "Art of Photography."

The remainder of our space will be better devoted to a brief consideration of the

WONDERS OF PHOTOGRAPHY.

The art has now been brought so completely within reach of the public, that anyone who can spare sixpence may possess a specimen of it. This familiarity with its wonderful results, however, exists with much ignorance of its method, and of what may be called its more curious or recondite capabilities.

As an illustration of the popular ignorance about photography, take an instance recorded three or four years ago. A thief went ostensibly to have his photograph taken, but really to see what he could steal. He seized his opportunity when the photographer had retired to develop the plate, and made off with a valuable lens, quite

unconscious of the fact that the few seconds he had sat facing the camera had placed his portrait in the hands of the operator. Of course, the means of identifying him speedily found its way into the hands of the police.

Another wonder of photography is the success that has been achieved in taking photographs of objects in motion. For example, a shot or a shell has been depicted at the instant of its leaving the cannon's mouth. By an ingenious mechanical contrivance, the rate at which the shot travels can be ascertained at the same time.

Mr. Alfred A. Pollock, in a communication to the *Photographic Journal* several years ago, suggests a process by which a person in motion could be photographed, and afterwards *seen in motion*. His plan is a very simple adaptation of the idea worked out in the wheel of life. Instead of the usual negative, a number of plates, say fifty, would be prepared on a disc, and the person whose portrait is to be taken, having been focussed as usual, would be made to walk up and down between certain threads properly fixed for his guidance. The mechanical arrangement would be such as to distribute the two steps of the subject over the whole of the prepared plates at the same instant. From the negatives so obtained, prints would be taken in the usual way, and mounted upon a revolving disc. Looked at through the slit in the same manner as the figures in the wheel of life—a toy which the young reader will no doubt be familiar with—the person photographed would be seen walking, and the rate at which the disc revolved would regulate his speed. By this, or even by a simpler practical method, it is probable the public will soon be photographed in motion. Already the London Stereoscopic Company have succeeded in producing a marvellous little toy called the kinescope. This ingenious toy in outward appearance resembles a lock, and it can be worn suspended from the watch-chain like a charm. You look through a small hole, and see one or more figures, which are set in motion by pressing.

The magic photograph recently brought out in Paris and London is contained in two envelopes. White albumenised papers are enclosed in one, and in the other slips of blotting-paper of a corresponding size. One of each of the pieces of paper having been moistened with water, and the one laid upon the other, a beautiful photograph is brought to view on the albumenised surface. In fact, the photograph has been printed in the usual way, and then decolourised by a chemical agent, while the blotting-paper has been prepared with another agent, which only requires the addition of moisture to enable it to restore the photographic image to view. Professor Roscoe illustrated this subject at the Royal Institution in March, 1868, when he developed a latent image on the screen of a magic lantern, so that the whole audience could see it.

Next to the above in curious interest is what may be called microscopic photography, or the reduction of large objects into such small dimensions that the picture is invisible to the naked eye. Mr.

Shadbolt, in 1854, was the first who executed these small photographs, by making an achromatic object-glass 1 or $1\frac{1}{2}$ inch focus the lens of a camera, and using a peculiar kind of collodion. His portraits varied from one-twentieth to one-fortieth of an inch in diameter, and would bear to be magnified a hundred times. Mr. Dancer, of Manchester, produced a family group of *seven full-length photographs* in a spot the size of a pin's head; and he states that it is only a question of trouble to include 10,000 portraits in a square inch. About fifteen years ago it was suggested that a diplomatic despatch might be conveyed in a spot no bigger than a full stop. Since that time the idea has been worked out in a variety of ways, a full page of the *Times* newspaper or an extensive landscape having been photographed in so small a space.

Before concluding this article we may also notice some remarkable instances of grotesque or caricature photography. When the lamented Abraham Lincoln was President of the United States, his photographic portrait was exhibited, and to the naked eye appeared as if pitted with the small-pox. On examining the dots with a microscope, they were found to consist of portraits of generals, politicians, divines, poets, actresses, and other well-known characters suitably placed. Jeff. Davis would be found in the President's eye; McClellan on the tip of his nose; Miss Cushman on his lips, and so on. All these likenesses were said to be very striking, and the whole caricature was said to be a very felicitous performance. Something of the same comic character was done in Rome, when well-known figures, suggestive of a satirical application, were published with the heads of public characters. Thus the face of Antonelli appeared on the shoulders of Fra Diavolo; and the Queen of Naples was made to figure as Moll Flagon. Even the Pope himself was not spared. The speedy result, however, was a Papal edict against the enormity, by which the photographic artists were subjected to the loss of their places and instruments, a fine of one hundred dollars, and a year in the galleys! The models who dared to sit for such figures were denounced in the same penalties.

There are not many now who have not been patrons of the photographic art. The desire to be portrayed well manifests itself, almost without exception, in careful preparation. Young reader, a correct portrait will one day be exhibited of you—the spectators will be innumerable—make suitable preparation, so as to appear without deformity.

BIBLE QUESTIONS.

1. WHAT animal is "strongest among beasts and turneth not away for any?"
2. With what did the woman anoint Jesus' feet?
3. Who was the wife of Ahasuerus?

4. How many wives had Rehoboam ?
 5. What did Jacob pour upon the stone that he " had put for his pillows ? "
 6. One of the rulers of the Jews.
 7. Who witnessed the translation of Elijah
 8. Who found Hagar " by a fountain of water in the wilderness ? "
 9. With what did Jael kill Sisera ?
 10. Who was governor in Ahab's house ?
 11. Where was the ship on which Jonah was going ?
 12. Who was the mother of Samuel ?
 13. At what time did the dove seek the ark ?
 14. Who " gleaned in the field after the reapers ? "
- The initials of the answers form one of Christ's commands.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

APRIL.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
7 The Good Shepherd	John x. 1—16.....	ver. 11.
14 The Family at Bethany..	John xi. 1—19 ...	xv. 14.
21 The Resurrection and the Life	John xi. 25—44....	1 Thess. iv. 14.
28 Jesus Anointed.....	John xii. 1—11.....	Matt. xxvi. 13.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
7 Josiah's Early Piety	2 Chron. xxxiv. 1-8,	29-38] Eccl. xii. 1.
14 The Scriptures found and searched.....	2Chron.xxxiv.14-28	John v. 39.
21 Jeremiah's Warning	Jer. xxvi. 1—16..	ver. 13.
28 The Rechabites.....	Jer. xxxv.....	ver. 15.

MAY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
5 The Saviour lifted up	John xii. 20—36...	ver. 32.
12 Humility taught.....	John xiii. 1—17 ...	Matt. xviii. 4.
1 Christ's Words of Comfort	John xiv. 1—14 ...	ver. 2.
26 The True Vine	John xv. 1—11 ...	ver. 5.

AFTERNOON SUBJECTS.			Golden Texts for Repetition.
	SUBJECT.	FOR READING.	
SECOND QUARTER.			
5	The Captivity of Judah...	Jer. lii. 1—16	Isa. lix. 2.
12	The Captives in Babylon	Dan. i. 1—17	Ps. cxi. 10.
19	Nebuchadnezzar's Dream	Dan. ii. 36—49.....	ver. 47.
26	The Fiery Furnace.....	Dan. iii. 8—30.....	ver. 17.

SHERIFF HILL, GATESHEAD.—Among the ladies who presided over stalls at the sale reported in the INSTRUCTOR last month the names of the Misses Scott should have been inserted.

Memoir.

GEORGE STRETCH

DIED on Saturday, December 22nd, 1877, in the nineteenth year of his age, after a painful illness of five days. He had been a scholar in our Sunday school at Leek from his infancy. It was his delight to attend the school, and regularly on the Lord's Day was he seen in his class, when he always paid great attention, and expressed his thoughts in a gentle and Christianlike manner. He was also a member of our Young Men's Mutual Improvement Class, for which he was preparing an essay to be delivered on the 5th January, subject "The Way of Salvation." In the session of 1876 he read an excellent paper on the "Book of Books." He was willing to undertake anything that was beneficial to his school, and always supported its cause in a hearty manner. He was present at school on Sunday, December 16th, when he asked his teacher to allow us to discuss the "Resurrection" on the following Sabbath. He was seized with illness the following day, and ere the Sunday came his spirit had fled to its Maker. During his illness his body was racked with intense pain, yet he never murmured, but once remarked, "My sufferings are nothing compared to those that Jesus Christ bore." On the Saturday he called his father, mother, brother, and sisters to his side, bade them all good-bye, and requested them to meet him in heaven. He then called his superintendent, teacher, myself, and another of his companions, together with his relations, and entreated us all to meet him in heaven. He also thanked his friends for all their kindness to him. Shortly afterwards he began to sing, "There is sweet rest in heaven," and asked his superintendent to pray, after which, seeing his parents crying, he called his father to him and asked him whether he wished him to die. His father replying "No," he said, "Then we will ask the Lord," and prayed in a fervent manner, asking God to comfort his father. He then bequeathed all his possessions to his mother, and said that he was ready to die. Shortly afterwards he expressed a wish for the Rev. T. Guttridge to bury him, and asked his father to raise a tombstone over his grave with the inscription, "Thy will be done." He then thought of the school, and told his superintendent to tell the scholars on the following

day, "That he was gone to be with the Lord, and that they must meet him in heaven." Shortly afterwards, he expired breathing the name of Jesus. His body was interred on Christmas Day in the presence of a great number of friends. May God grant that when we come to die we may have the same hope of heaven and a crown as our young brother had

A. K.

MATTHEW WALES,

SCOTSWOOD, NEWCASTLE-ON-TYNE,

It is truly said "in the midst of life we are in death." Very sudden and unexpected has been the stroke of death in the case of Matthew Wales—a young and beloved Sabbath-school teacher. On Saturday, December 22nd, he, with a few others, was busy in preparing the schoolroom for the approaching Christmas. He left the room with his friends and went to the Dean, and climbed a tree to get a few sprigs of ivy to decorate the room. Unfortunately he lost his foothold, and fell to the ground and dislocated his neck. Not returning home for tea, his father went to the Dean with a lantern, as it was dark, in search of his son, and had the agony of finding him lying under the tree cold and dead. To him sudden death would be sudden glory. He had been born and reared in the village, and carried from his infancy to the school and the house of God. A little more than a twelvemonth before his death he gave his heart to God, united with the Church, and became an earnest, devoted follower of the meek and lowly Jesus. He attended his class week after week and enjoyed the fellowship of saints. He loved all the means of grace, and gave proof that he was growing in the knowledge of his Lord and Saviour. He was one of the collectors for our mission fund, and was anxious to do what he could for this good cause. He was also a member of the Band of Hope Society, and was one of its most useful members. After having passed through the various classes in the Sabbath school he was appointed teacher to one of the junior-classes, with which he was greatly delighted, and managed with skill and tact. It was his greatest pleasure to be employed in doing good; he was an earnest worker and a young Christian of great promise to the Church. He has left behind him a few papers, memorials of his thoughts, on texts of Scripture. One I have before me on Hosea x., 12, "It is time to seek the Lord." In this paper he urges the young to seek the Lord at once, and that there is no time like the present. He names those who have sought the Lord. My young reader, have you sought the Lord? If you have not, listen to Him who "being dead yet speaketh." Seek the Lord at once, there is no time like the present.

The last class-meeting Matthew attended was one of sweetness and unusual solemnity; at the close, when some were speaking of the old year, he made the remark, "It was hard to say who might live to see another Sabbath morning." This was his last on earth, his next Sabbath was in heaven. His sudden death cast a gloom over the school and Church at Scotswood. He was buried on Christmas Day in Newburn, and was followed to his grave by the teachers and scholars and a large number of sorrowing friends and acquaintances. May his devoted life and sudden death lead many to give their hearts to God and their lives to His service.

E. HODGSON.

Poetry.

A GENTLEMAN.

It is a rose, a blooming rose,
Which grows beside a cottage door ;
And outward its sweet fragrance throws
To please, and greet, and bless the poor.
The touch of kind but horny hands
It does not deem disparity ;
And for the kiss of love expands,
And not the lips of wealth demands :
Yes ! this is charity.

It is a lily, tender, fair,
And nestling in a shady nook.
Contentment smiles upon it there
Beside the laughing, rippling brook
Nor cares it to attract the eyes,
But lowly bends its emerald stem ;
Nor covets fortune's highest prize,
Nor seeks the glittering diadem :
Such is humility.

It is a frail forget-me-not,
So perfect in its littleness,
Making the lover in his lot
Content, and disdain fickleness.
Its petals tint of azure bear,
By which to serve with duty
Their noble queen, the fairies swear,
In snowy robes and golden hair :
This, yes, this is beauty.

The three combine, and take the thread
Of a sunbeam glancing brightly,
And bind the blue, and white, and red
In a triplet, pleasing, sightly.
Wear it for ever on thy breast,
And everyone who sees it, can
Confess that thou art highly blest,
And that it forms the rightful crest
Of a true gentleman.



BIRD'S NEST OVERTURNED.

BIRD'S NEST OVERTURNED.



I remember when we were a child reading a story, told in rhyme, of a father and mother who, returning to their home after a day's absence, found their house in flames, and their children burnt to death in the fire. The story made us very sad, and tears flowed down our cheeks as we thought of the sufferings of the poor children and the great grief of their broken-hearted parents. How wicked and cruel we should have thought those to have been who could have set that house on fire wilfully. We do not say that children and birds are of the same value. Our blessed Saviour tells us we are much better than they. But He also tells us that our Heavenly Father feedeth them, and so makes them the object of His care that not one of them falleth to the ground without His notice. On these grounds, then, we should be kind to birds. God is, and we should try to be like God, and thus show that we are truly His children. "Be ye merciful, as your Father which is in heaven is merciful." And then birds have feelings as well as ourselves. They love the warm and pretty nests which they build with so much industry and trouble, and they love the young ones which are in their nests. They are their children, and according to their nature they love them as truly as we human parents love our children. Look at the picture on the other page, and say whether you do not think the mother bird, who has come home to find her nest overturned and all her little birds thrown out and dead, will not be greatly distressed at the sight. It would perhaps be scarcely true to say that she would weep over her misfortune, but we can well believe she would do something very like crying. Most country boys like bird-nesting. We were very fond of it ourselves when a lad, and we have seen the parent bird, when robbed of her nest and young ones, fly round and round uttering cries of distress, and sometimes in her anguish, and perhaps her anger too, she has almost flown in our face. In looking back we sometimes wonder how we could have been so cruel as thus to give the poor birds such sorrow for our gratification. But it was done from want of thought, and it did not seem to occur to us that birds had the same feelings as ourselves. We hope better things of our young readers. We advise them to forego the pleasures of bird-nesting. Birds are among the most beautiful objects which God has

created, and wantonly to destroy or distress them is a thing altogether unworthy of our more highly endowed humanity.

J. HUDSTON.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 100.

FROM BEN BARLOW TO DR. BARLOW.

Waterside House, Worcester,
May 3rd, 187—.

MY DEAR FATHER,—

I am glad to see from mother's letter that you are all so well at home. I too am all right in health, and thoroughly enjoying the glorious spring weather we are having. We saw such lots of wild flowers last Saturday—we were off in the country for a run.

Ted is quite recovered from the effects of the fire, and is able to join us in our games, but somehow he doesn't seem like the same fellow—he's so much quieter than he was. Of course he can't help joking; but if he says a funny thing now, he does it in a quiet way, whereas you know he was always either laughing, singing, or playing somebody a prank.

You must not think Ted is turned melancholy. He is as pleasant as ever. He was always a favourite; but I believe the lads like him better than ever, for formerly when they laughed at his fun, they were never sure but that he might the next minute turn the laugh against them.

I asked Ted the other day what had made him so different. He seemed shy of telling me at first, but at length he said, when he found himself in the infirmary after the fire, his burns were so painful that he made up his mind he could never recover. And as he lay there with nothing to do but think, it seemed as if his life stood up before him, and he says it appeared to him as if he had never done anything but tease and ridicule his schoolfellows, and make fun of everything and everybody. So he made up his mind that if God would spare him from the consequences of his foolish disobedience, he would in future consider other people more, and try and be more thoughtful.

He has asked me to thank you heartily for the interest you took in him, and for coming to see him. He says you cheered him up a great deal by your encouraging words.

Give my love to mother, Clara, and Helen, and my kind regards to good old Bob. Your affectionate son,

BEN.

Letter No. 101.

From DR. BARLOW to BEN BARLOW.

The Laurels, Woodbourne,
May 8th, 187—.

DEAR BEN,—

Your letter has pleased me much. I shall be surprised if your friend doesn't live to see the day when he will have to thank God that he met with his accident. If it sobers down his exuberant love of frolic and fun, and makes him see that life isn't all play, it will have done him a great service.

I hope *you* will not be altogether without good from the same cause, though the lesson was not impressed so deeply on you as on him. I don't want you to seem prematurely old. I should hate to see "old heads on young shoulders." But you are now old enough to think about other things than games, and one of the best lessons for a boy to learn is to be considerate for others, and to look ahead at the probable consequences of his present actions.

But if you are at all inclined to profit by the misfortune you so narrowly escaped, I have said enough to direct your reflections in the right channel; and if you are not so disposed, I am throwing away time which I might better employ in writing out prescriptions for my patients.

Talking of patients, I expect I shall be going to London next week or week after. The Tinbury gentleman who underwent the operation last October is going to submit to another. If I have time I shall certainly call and see Mr. Instone. I was much pleased with what little I saw of him at Worcester, and should like to make his closer acquaintance.

With kind regards to your friend, and love from us all to yourself, I am, yours truly,

OLIVER BARLOW.

Letter No. 102.

From BEN BARLOW to DR. BARLOW.

Waterside House, Worcester,
May 9th, 187—.

DEAR FATHER,—

Thank you for your letter. I really will try to be more thoughtful in the future.

I wish I could go with you to London. You must please be sure and call on the Instones. I showed Ted your letter, and he has written off by this post to tell his pa that you are coming. So you will get a special invitation from them in two or three days.

With love to all at home, I remain, your dear son,

BEN.

Letter No. 103.

FROM DR. BARLOW to BEN BARLOW.

Strand Hotel, London,
May 23rd, 187—.

DEAR BEN,—

I have just returned from dining at Mr. Instone's. They were all pleased to see me and made me very welcome. Mrs. Instone is a very nice lady indeed, and fully equals the good opinion of her refinement and good sense which I had formed from your report. Her husband I liked even better than on first acquaintance. From inquiries I made among medical friends, I learn he is very highly spoken of for his integrity as also for his professional attainments.

I was surprised to find little Ernie not nearly so ill as I expected. They tell me he has been gradually getting a little better for some months. It may interest you to know that his improvement is generally attributed to his anxiety to look after his rabbits. This has caused him to make efforts to play with them, and he is now able to move about slowly without help.

I don't know, but I am inclined to hope the little fellow's case is not quite so hopeless as the family have thought. I believe he suffers more from weakness than from any real injury to the spine. Don't tell this to Ted, lest I might be mistaken. I have arranged with Mr. Instone to get one of the first surgeons of the day to see Ernie tomorrow after the operation. I only hope his opinion may confirm mine.

I must close now. I feel tired and sleepy, and as my work tomorrow will want a cool head and steady nerves, I think I shall now seek them by going to bed; though how long I shall toss about before I get to sleep in this noisy thoroughfare I cannot say. Your affectionate father,

OLIVER BARLOW.

Letter No. 104.

FROM CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,
May 24th, 187—.

MY DEAR BEN,—

I find I have half-an-hour to spare, so I think I will occupy it in scribbling to you.

One reason why I sit down to write to you is that I owe you a letter, and it may be a long time before I have as good a chance of paying my debt. But the chief reason is that I have some good news to tell you.

You will hardly believe it, but I have got another change of situation, though still under the same firm. The business has increased so much that we last week took some more premises, and opened a branch manufactory in Wood Street. Our head clerk has gone to manage the new place, and he took with him one of the other clerks, so that there has been a general move up. I am now

next to the invoice clerk! Think of that! I have only been here about nine months, and have already had two advances in position and wages.

I like my new duties very well, and our new head clerk is such a nice fellow. He is nephew to Mr. Carson—only about thirty years of age, but he is a thorough business gentleman. He has been superintending the London office for his uncle for two or three years. He makes us look sharp round the corner, but for all that I like him a score times better than the one who has left—he is always cheerful and pleasant.

I am glad to hear your friend Instone is back at school again. Joke about it as you may, I think I can see that both you and he are growing more serious. It is well you are, or else when you came over for your holidays you might have found me altogether too quiet and thoughtful for your company.

Father and mother send their best wishes to you. Pray remember me to Instone. I remain, my dear Ben, your ever affectionate friend,
CHARLIE THORNTON.

Letter No. 105.

FROM DR. BARLOW TO BEN BARLOW.

Strand Hotel, London.

May 25th, 187—.

MY DEAR BEN,—

You see I have not yet returned home. I have good news for you and your friend. I told you I was going to have high professional advice about Ernie. Well, the cleverest surgeon I know examined him yesterday. He confirms my opinion—that there is no organic disease of the spine, only extreme debility or weakness. That being the case, what he wants is nourishing food, pure air, and cheerful, interesting surroundings. My friend said he ought to live in the country for the whole summer, at some farmhouse, and have other children to play and chat with.

It at once occurred to me to take him to Woodbourne. We have plenty of room at home, the place is wonderfully healthy, your mother would nurse him, your sisters would amuse him. Bbb would carry or wheel him wherever he might wish to go, and, lastly, I should always be at hand to detect any relapse or prescribe for any little ailment.

I made the proposition to Mr. and Mrs. Instone. He was afraid the change might become a burden to us, and she did not like to let her weakly child out of her care. However, they at length saw the necessity for some such arrangement. Ernie was delighted at the thought of visiting the country. And so, on the understanding that his father and mother would come down to see how he goes on every few weeks, it was at last decided for him to go with me to-morrow.

I have engaged a compartment for the journey, and I don't think he will be affected much by it, for we shall rest twice on the road.

So, if all goes as well as we hope, you will find your little friend here when you come home at midsummer. He is very anxious about his rabbits, but his elder brother has pledged himself to attend to them regularly, and he is reconciled to part with them by the hope of having all yours to look after at Woodbourne.

With kind regards to your friend, I am your affectionate father,
OLIVER BARLOW.

Letter No. 106.

From BEN BARLOW to DR. BARLOW.

Waterside House, Worcester,
May 27th, 187—.

MY DEAR FATHER,—

I am so glad you went to London and called to see the Instones. Perhaps if you hadn't Ernie might have been years longer in recovering his strength, or he might never have been cured at all. Ted says they had given up all hopes of his ever being able to walk. It seems they took him to lots of doctors when he was a baby, and they all thought he would be helpless for life.

I cannot tell you how thankful Ted is to learn that there is hope of his brother some day being well and strong. He says, since the time he spent in the infirmary, he has been more than ever sorry for little Ernie having to lie about and be wheeled and carried.

I wish I were at home to help to amuse the little fellow. But I know he will be well looked after. Mother will be as gentle and kind to him as if he were her own, and I'm sure Clara and Helen will interest him with their books and quiet games. I will write one of these days to tell Bob to let him play with my rabbits. But I needn't. I'll be bound Ernie will find out what a good fellow Bob is, and soon learn to do almost what he likes with him—the good-natured fellow.

Give my love to mother, sisters, and Ernie, and accept the same yourself. From your affectionate son,
BEN BARLOW.

P.S.—My box of colours is in one of my drawers. Please let Ernie have them to colour prints with. I remember he used to like that at home, and perhaps he has forgotten to bring his own colours.



THE PRISONER'S CHILDREN.

By MRS. MELDRUM, *Author of "NED'S SEARCH."*

CHAPTER V.—WILLIE'S PERSECUTION.

IT was still early, and only one or two boys were loitering about the gates, which were not yet open.

"Hallo!" exclaimed one, "here comes a gentleman in his carriage."

"So there is. I say, Sir, won't you let me have a ride?" said a second, touching his cap with mock respect to Willie.

The child, unused to teasing, replied with a smile, "I don't think you could, but you may try if you want."

"Oh, thank you, don't trouble; I've no fancy for that. If I couldn't get to school without pushing a thing like that along I'd just stop at home."

"But don't you know I'm lame?" asked Willie. "I couldn't get this far without my sled; I always had to stop at home till Mr. Kelly made it—Bernard's father, you know."

"Oh, yes! We know Bernard's father, and someone else's, too. Whose father's in prison, eh?"

At the cruel taunt the colour rushed over the boy's face, and receded, leaving it stony white. Then, hastily turning, he began to push himself homewards at his utmost speed.

"Here, here, stop! Where are you going? You won't slip us like that, if you're thinking of meeting the master. Just come back, will you?"

"I'm not going to meet anybody; I'm going home," said Willie, not slackening his speed.

"Oh, oh! Goin' home, are you? Well, go along then, an' good riddance to your father's son."

"Nay, but he's not going to play truant neither, and then blame it on us!" exclaimed one of his tormentors. "Just come back, youngster, this minute!"

Not a word answered the child, but continued his way.

"That'll never do," said the last speaker. "Mr. Wild is sure to go to see after him, and then it'll be a case for us, for the little un can make out a grand tale, and the master 'll believe every word he says."

In another minute Willie was overtaken and dragged back to the school gates. Powerless to escape, he was compelled to hear all the jokes and thoughtless teasing of the heartless group, and ere long the tears were pouring down his cheeks, manfully though he struggled to repress them.

"Oh, see the baby, see the baby! Dear little thing, it should cry, it should! Who's got a bottle to catch the tears?"

It was too much for the child to bear longer, and in another

moment the boys who stood nearest were astonished by hard, well-aimed blows upon their feet from the blocks of wood with which Willie pushed himself along. So startling and painful was the attack that they involuntarily drew back for an instant. Then as by one impulse they threw themselves upon their assailant, wrested his weapons from his slender fingers, and would have taken summary vengeance, but at that moment several of Willie's friends appeared, and close behind them Mr. Wild, at the sight of whom Willie's foes fled precipitately.

"Why, Willie, what is the matter?" exclaimed the master, bending over the sobbing child, who was too agitated to reply. "Come with me in the schoolroom, and let us inquire into this trouble."

"No, no," sobbed Willie, "I'll never go in again, never."

"Why, my boy, have they been teasing you? I hope not, but you must try to be brave."

"No, no; I can't go in; I want to go home; oh, I want to go to Lucy!" Mr. Wild continued his persuasions, and then in hurried, broken sentences Willie told the story of the persecution to which he had been subjected.

Mr. Wild's brow contracted, and a stern, troubled expression gathered on his face. He urged the boy no further, but having picked up the blocks which the runaways had thrown down, he deputed two of the elder scholars to see him safely home.

"I will call and see you some day soon, Willie; you had better not come again till I have been. Good morning, my poor little fellow;" and he knelt and kissed the tear-stained face, an act of which neither he nor his big boys standing by felt ashamed, and which removed half the weight from Willie's heart at once. So great is the power of freely-given sympathy.

Warm sympathy also awaited him at home, and after his escort had departed he was hugged and cried over and nursed by Lucy with unusual fondness. Then Mrs. Kelly, who had seen him return, came down to inquire the reason both for her own satisfaction and Bernard's. She pitied and comforted him in her turn, and by degrees the trouble was almost forgotten.

"I'll tell you what, Willie, you shall go to bed, if you don't mind, an' I'll wash your things. I was wondering when I should have the chance. You might have come back on purpose."

Washing was such a new idea to Lucy that she looked upon the opportunity for making the experiment as quite a festive occasion, and inspired Willie with so much of her spirit as to make him willing to wrap himself in an old shawl and stop in the bed, which stood in a little recess, just through the shop.

The clothes were in the water and Lucy diligently rubbing the skin off her unaccustomed fingers when, from the darkening of her dimly lighted cellar, she knew someone was entering. Shaking the wet from her hands, she turned to serve the supposed customer.

Generally she could judge what would be wanted by the appearance of the incomer. Mothers and children came for toffy, or shuttle-cocks, or gingerbread. Other people mostly for gingerbeer or pipes. But this gentleman certainly did not want sweets or toys, and she was sure he did not want a pipe, for Lucy had long since learned the incongruity of pipes and respectability. It must be gingerbeer, and she was reaching over for one, saying, "Gingerbeer, Sir?" when the stranger spoke—

"Are you Willie Tomlin's sister?"

"Yes, Sir."

"And is Willie at home?"

"Yes, I'm here," called Willie. "Please come here, Mr. Wild. I have to stop in bed while Lu washes my things. I didn't think you'd be here so soon."

"Never mind, Willie; I can talk to you just as well there. Thank you, dear," as Lucy handed him their one chair.

Lucy's eye brightened at the last word. It was seldom indeed she had been called by any loving title. She wondered that Willie could make up his mind to leave school, and yet it was evident from the conversation that upon that point he was determined.

At first Mr. Wild tried to argue and persuade him that to continue a scholar would be for his own and Lucy's good; but to no purpose, and the only promise he could obtain was not to forget what he had already learned.

"Teach your sister, and that will help you to remember for yourself," Mr. Wild said as he rose. "Now let us kneel down and ask our Heavenly Father to take care of us and make us good."

No sooner was their visitor gone than Willie proceeded to act upon his advice.

"Lu, bring me that spelling-book and come here."

"What for?"

"I want it."

"Here then, take it."

"Oh, but I want you, too."

"Well, but I can't come; I must get on with my washin'."

"Oh, never mind it; I can stop in bed to-morrow."

"Well," said Lucy, reluctantly, glancing at the deserted tub, "what do you want me to do?"

"Why, to learn to read, to be sure; see, this is 'O.'"

"What's it 'O' for?" inquired Lucy.

"What for! Why, that's its name. It's 'O.' Say 'O.'"

"What's the use of saying 'O' when there's nothin' to say it for?"

"Oh, dear, there is something; don't you see that it's a letter?"

"It's a very little letter," said Lucy, stooping over the book. "I never did have a letter, but I know they're gen'ly bigger than that."

"I don't mean that sort of letter that the postman brings; that's nothing to do with it."

"Why did you say so, then?"

"I didn't; I said it was a letter, and so it is. Mr. Wild said so, and he knows. At any rate, it's called 'O.' Can you think on?"

"Course I can think on. It's 'O,'" said Lucy, proud of her memory.

"Well, now, don't forget it; can you find another?"

Lucy pointed out several, and Willie was highly delighted with the rapidity of her progress, and went on to teach other letters, but with less success, and at length Lucy yawned for the twentieth time, and said wearily—

"Won't that do for to-day, Willie? I can't keep none of them in my head, only 'O.' I know that because it's like the top of my wash-tub."

Willie laughed as he closed the book.

"Your head is full of washing, isn't it? Go and get on with it, then. I'll tell you some more to-morrow."

DAISY BANK; OR, SISTER ELLEN'S MINISTRY.

By J. CAPES STORY.

CHAPTER VIII.—JOE'S BIRTHDAY.

WHEN summer was quite come, and the garden was full of bloom, it happened one day to be Joe's birthday. The day was honoured by inviting a numerous party to enjoy the hospitality of the Waltons' home.

It was, of course, impossible for Joe to join in the boisterous fun of the young folks, but Ellen had made special arrangements for his pleasure.

The Bath-chair was made as much as possible like a couch, upon which Joe might lie and be drawn about the garden to watch the games of croquet, or ball, or tig, or whatever else might be the amusement of the moment.

For some time Joe's chair stood by the side of a centre flower-bed in which Ellen and he had a special interest. The fact was that those two had entered into an agreement with the gardener to have this bed planted entirely with different kinds of daisies, Ellen having herself paid special attention to their culture.

The gardener had not readily consented to such an arrangement; indeed, he said to some one that they might as well have tried dandelions or thistles. But even he was surprised at the effective display which had been produced. Joe derived no small gratification from listening to the expressions of admiration which fell from one visitor and another, and it was fine fun for him to tell as many as he could the open secret that the flower was Mrs. Walton's

favourite, and that Ellen and he had planned it all as a pleasing sight for her.

It was delightful to see with what eagerness the young people studied the pleasure of the invalid boy, and sought to be to him eyes, and hands, and feet; indeed, to do for him all they could invent for his enjoyment.

And then Minnie Maylow was there, and Harry, as usual, was going into quiet raptures about her. Little Walter, popping hither and thither among the company, almost wild with excitement, happened to overhear Harry remark to some one that the colour of Minnie's eyes was pale blue, which he thought was a piece of desirable information for the young lady herself.

He therefore sought a convenient opportunity of imparting it, and this occurred when the company were together at tea.

"Miss Maylow," said he, "I know somesin about oo."

"Well, may I ask what you know, Walter?"

"It is about the colour of oor eyes."

"Well, you shall tell me if you like what colour they are."

"Harry says the colour is pale white."

Whereupon Minnie blushed that Harry should talk about her eyes at all, and the company laughed, and Harry protested that he had said no such thing.

And Dick Waring was also there, strutting about in a new midshipman's suit, with a cap which had upon the front a gilt anchor and a little flag. Of course he looked very imposing. He might already have been in perils oft from the manner in which he described the places he was going to visit and the life he was about to lead. The ground for all his talk consisted in the fact that a ship had been found for him and agreements made which would require his leaving home in a few days.

As for Harry, he had again mentioned his desire to his father, and, as he expected, received no encouragement. Ellen also had sought an opportunity of speaking with her parents, but had not yet found one. However, on this evening of Joe's birthday, when the company had departed and the children were all in bed, except Harry and Ellen, the latter succeeded in introducing the subject, at the expense of great pain to herself, after supper.

Mrs. Walton said incidentally, "I understand Dick Waring sails soon."

"Yes, mother, a week to-day," answered Harry.

"And you would like to go with him, I suppose?" was Ellen's remark.

"Yes, I should, indeed, if father and mother would consent."

"Oh, Harry, how can you possibly say so!" exclaimed Mrs. Walton.

And Harry was silent.

"I am sure Harry has no wish to leave us," said Ellen. "He has told me all about it, mother, but he has set his heart on being

a sea-captain, and he knows he cannot be that without being much away from home. For my own part, I am grieved at the thought of letting him go. I wanted so much to have my big brother at home, yet I have promised Harry to intercede with you and father to give your permission, for I feel he is earnest in his desire. Who knows but some day he may be a brave commander, like that old uncle of father's you have sometimes told us about, who went to the Arctic regions to catch seals and whales?"

We will not dwell upon the painful scene. At first both Mr. and Mrs. Walton refused to hear of it, as they had done before. Afterwards Mrs. Walton gave way. And at last Mr. Walton said—

"Well, if you must go, I will not further deny you. I have got a good business for you, after toiling hard for years. It is there, made to your hands, and you won't have it. You will take to the sea, you say. Take to it, then, as it is. I'll have no gentleman sailor. Don't think I'll pay for gilt lace and buttons and fine blue cloth. I'll do nothing of the kind. I began at the beginning in my work, and so may you in yours. I've had hands hard enough with rough labour in my time, and you may have the same if you choose. I tell you now plainly you may go. But mark, when you've had money to pay for the outfit you will require, and for your fare to the port you start from, you have nothing more from me, and I forbid your mother or your sister to supply you with any. I've eaten my crust; go now and eat yours. That's all I have to say."

Mr. Walton was reputedly a Christian man, and generally his conduct had agreed with his profession. As too often occurs, he was not prepared for the moment of supreme trial. Neither Harry nor Ellen had ever seen the eyes of their father flash as they did now with angry determination as he brought down his hand with a heavy stroke upon the table, by way of emphasis to what he said.

Mrs. Walton also could scarcely believe what she heard. Mr. Walton's extreme disappointment in his son, it appeared, had quite embittered his heart.

Though Harry had thought of the worst as possible, yet he had scarcely expected it. He felt himself now almost flung away by his father. He in his turn then became angry. He did not answer his father, but he went from his presence with a sense of injury burning in his heart which it was hard to subdue. Harry did not sleep that night, and the next day he did not go to business, but sat sullenly at home, all in doubt as to what to do. For a moment he would have asked his father to remember no more what had been said, and would have consented to remain at home, so much did he shrink from what was before him. But this feeling did not last long. And then he brooded upon his father's angry, almost vindictive spirit, and was ready to vow that he would go forth and never see his father again. It was just when this feeling was dominant that Ellen came into his room, found him sitting by his bed-

side, and without speaking a word threw her arms round his neck and kissed him.

"Oh, don't, sister; I'm not fit for you to kiss me."

"You must allow me to decide that, brother"—and she kissed him again.

"But, if you knew the thoughts I had in my mind just now, you would hate me."

"Not so, Harry; if they are bad thoughts I would rather help you to chase them away."

"Bless you, sister! If anything would do that it would surely be a pure kiss of yours."

"You forget, Harry, that I can only give you a little help. We both need to look to the Highest, that we may have our thoughts and lives made acceptable to Him. Brother, shall we pray together now?"

Harry did not answer, but they both sank on their knees in that quiet chamber, and Ellen uttered a few earnest petitions to Him who is the one sufficient helper of souls struggling and fainting to get free from evil thralls.

Within a month Harry sailed from London, having had to find his own ship, which was not the one in which Dick Waring sailed, and having had to make his own terms. From the night of Joe's birthday his father had spoken to him not a word.

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

V.—LOVE AND SELFISHNESS.

"A gift with a kind look is a double present." "He that hath love in his heart hath spurs in his sides."

LIFE without love is poor and dull: it is like a lark without a song, a flower without fragrance or beauty, a cloud without rain. Home without love is a cold if not miserable place.

It may have wealth and refinement, rich carpets and costly pictures, but in spite of all this it will be chill and cheerless. True affection can make almost any home happy; it can impart warmth, brightness, and melody to any life. Whenever men begin to look beneath the surface of things, and to grapple sternly with the realities of life, they feel the need of that love "which suffereth long and is kind, which seeketh not her own." My readers may have met with the following proverb—"The burden is light on another's shoulder." Yes, when that shoulder belongs to a cold, unloving man; but it is not light on the shoulder of one who has learned to

"rejoice with those that do rejoice, and to weep with those that weep." The burden of Israel's bondage was not light on the shoulders of Moses. The burden of Naomi's sorrow was not light on the shoulders of Ruth. The burden of millions of slaves was not light on the shoulders of Wilberforce. The enormous burden of guilt and shame which belonged to our race was not light on the shoulders of Jesus: "He bore our sins in His own body on the tree;" "He carried our sorrows." Let us pause and think of this, and then breathe this as our fervent prayer:—

"When we behold Thy bleeding wounds,
And the rough way which Thou hast trod,
Make us to hate the load of sin
That lay so heavy on our God."

Love gives itself away, but it is not lost. "That which love gives at the door God gives back at the window." "There is that giveth and yet increaseth; there is that withholdeth more than is meet, and it tendeth to poverty." A greedy, grasping disposition often defeats itself, as we see in the story of the dog who had in his mouth a large piece of mutton. Passing by some water he saw the shadow of this mutton, and thinking that it was another piece, and not content with the one he had, he tried to lay hold of the shadow, and so lost the substance, for it dropped in the water. So I have known men who, by eagerly snatching at that which did not fairly come within their reach, have lost part of what they previously possessed. A man like Paul, in whom this noble virtue of love is largely cultivated, is "willing to spend and be spent" for others, but the selfish man would if he could "sell the parings of his finger-nails and the droppings of his nose." Someone has said of the sordid man, that if possible he would sell God Himself for gold. We know that one sordid soul did sell the Son of God for thirty pieces of silver. As Herbert says:—

"For thirty pence he did my death devise
Who at three hundred did the ointment prize;—
Not half so sweet as my sweet sacrifice."

From cold, hard flint some sparks may be brought, but some men do not strike fire as easily as flint. It is only by looking at such men that you can understand that strange proverb, "Cold as charity." Real charity is far from cold; it glows, burns, flames with holy ardour. "Many waters cannot quench love." Selfishness contracts a man's soul, chokes the springs of sympathy and joy, dims his vision; but kindly deeds make windows through which we see God's beauty and grace. They make music for us at midnight. C. Kingsley says, "Think about yourself, about what *you* want, *you* like, what respect people ought to pay to *you*, what people think of *you*, and then to you nothing will be pure. You will spoil everything you touch; you will make sin and misery for yourself out of everything which

God sends you; you will be as wretched as you choose on earth or in heaven either." These are wise and weighty words. The noblest and loveliest life this world ever gazed upon was the life of one who "pleased not Himself." There is an old proverb which is a great favourite with very cautious and prudent men. It is this—"Never burn your fingers with snuffing another man's candle." Don't get into trouble of any sort by trying to get other people out; don't sacrifice your comfort, money, or health, by trying to make others happy. Of course if by this rule you judge men like Howard, and Martyn, and Latimer, and Paul, or men like Bright, and Gladstone, and Lincoln, you will be compelled to say that they were stupendous fools. They have done more than burn their fingers; they have exposed themselves to scorn and insult, suffering and loss. The apostles and martyrs did much more than burn their fingers; hands and arms and whole bodies were freely given to the flames. To whom is the world most indebted? Is it to these cautious, scheming, trimming souls, or the supposed rash, imprudent men? The former have done much to impoverish the life-blood of humanity, to freeze its purest currents of mercy, to cover its sky with dull leaden clouds. The latter have enriched the life-blood of our race; have dug deep channels and filled them with vital and healing streams. They have emancipated the slave, sheltered the orphan, and caused the widow's heart to sing for joy.

I have on my list other proverbs bearing upon this subject, but space will not permit me to dwell upon them. I will name two or three. "Let that which is lost be for God." A very base and hateful saying is that. "Every man for himself and God for us all." No, no! When it is every man for himself Satan is likely to have all! Let right and good deeds be done in a kindly manner. Don't let us be like the rude fellow who threw half-a-crown at a poor man so fiercely that he hurt his nose. Love is a plant that may be cultivated, a jewel that may be polished, a flame that may burn with ever increasing intensity, a stream flowing with ever augmenting force and purity.

"Dig channels for the stream of love
Where they may broadly run,
And love has overflowing streams
To fill them, every one.
But if at any time thou cease
Such channels to provide,
The very founts of love for thee
Will soon be parched and dried.
For we must share, if we would keep,
That good thing from above:
Ceasing to give we cease to have;
Such is the law of love."

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXVI.—THE SILKWORM.

NATURE affords innumerable illustrations of the truth expressed by the Scotch proverb—"Many littles make a mickle." The silk that is so universally esteemed, and that holds so important a place both for purposes of dress and ornament, is produced by the united labours of very small creatures. We can easily realise how we are indebted to sheep for the woollen cloth of which our coats are made, because the fleece of sheep is considerable, and each animal can be shorn once a year; but that all the silk that is manufactured and worn should be produced by small insects seems hardly credible. Yet such is the fact; and we may learn from it that there is a use and a purpose in this world for the smallest things.

The silkworm is a native of China, and the culture of silk was entirely confined to that country in ancient times. As far back as Chinese records go, from times really historical to vague eras where all is myth and parable, we are told of empresses, surrounded by their ladies, spending their leisure in superintending the hatching and rearing of silkworms, and in the weaving of silk veils and other articles of female attire. When the court sets the fashion the people soon follow it, and accordingly the Chinese were dressed in silks when the inhabitants of Britain wore the skins of animals captured in the chase. From China silk was imported into Persia, and after the subjugation of the Persian empire by Alexander the Great it was introduced into Greece and Rome. As long as silk was manufactured in China alone its price in Europe was prodigious, owing to its precarious transit. Even luxurious Romans hesitated at the enormous sum they were compelled to pay for this highly-prized commodity.

But the eggs were introduced first into Persia, and then into Turkey, and it was found that the worms flourished in these places as well as in China itself. The Chinese accordingly lost their monopoly, and Persia, Turkey, Greece, and India soon became noted for the successful culture of the silkworm.

Silkworms may be left to themselves on the mulberry trees, the leaves of which are their peculiar food; or they may be kept in a room set apart for the purpose, where they must be kept supplied with mulberry leaves at frequent intervals, as up to the time they begin to spin they eat (with the exception of the torpid periods) both night and day. The former method is uncertain, owing to the depredations of birds and the variations of the weather, and the latter is therefore most generally adopted. A room must be chosen with plenty of air, and exposed to the warming rays of the sun, for the

insects enjoy the light until they make for themselves dark cells by enveloping themselves in the silk they spin. Then by an economical arrangement of shelves or trays a vast amount of silk may be spun in a small apartment.

The worm when it first leaves the egg is extremely small and perfectly black. In a few days it changes to a greyish white, and casting off its old coat appears in a new habit. Then, after increasing in size and growing whiter, it falls into a sort of torpid sleep, on awaking from which it divests itself a second time of its shrunken skin, and appears quite another creature. Both colour and shape are changed, and for a short time it eats more than ever. Then it goes into a sleep once more, and for the third time throws off its covering. It then feeds almost without intermission until the time for spinning. When this commences it renounces its little world, and builds for itself a hermit's cell of surpassing beauty with the silk which it industriously spins. This cone of silk which it constructs is, of course, produced with the idea of satisfying its necessities, and not ours; it is intended to preserve it until, by a fourth change, it shall come forth with head, horns, wings, and feet, all complete, to live a life of gaiety in the air. This last change, however, is with a few exceptions prevented, for in casting off its old coat, and making its way out of the silk wound round it, the precious material is spoiled. Accordingly, when the spinning is completed, the cones are exposed to the sunshine, or in some instances plunged into hot water, and the ingenious little labourer is killed before it can injure the beautiful thread it has taken such pains to construct.

The silk is easily wound off the cones, the length generally being from two to three hundred yards. Of course it has to go through a variety of processes in manufacture, as the thread in its natural state is as much finer than a hair as a hair is finer than a cart-rope.

The structure of the silkworm is wonderfully adapted to the production of silk. There is that kind of pre-arranged relationship that there is between the machinery of a Lancashire mill and the cotton yarn that is spun by its mules and the cotton cloth that is woven by its looms. Only that it is more marvellous for a small insect to contain such complete and elaborate organisation than it is to see a large factory with its powerful engine and ingenious machines. The head and teeth, the feet and claws, the heart and lungs, the spine and intestines of the silkworm indicate the perfection that is exhibited in animals of a higher order; and the arrangements for the spinning of the fine silken thread are as complete as those by which the eagle is enabled to fly in the air, or the salmon to swim in the water. The poet speaks of that supreme power that "wings an angel, guides a sparrow," and this conjunction of ideas is both just and reverent, for look as we may at the greater or at the lesser objects of nature, the same perfection of goodness and wisdom is everywhere seen, and there is no creature so small but that it can bring to the thoughtful mind great and exalted ideas of God.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

XVI.—ARTS AND SCIENCES—TELEGRAPHY.

“ Speak the word and think the thought,
Quick 'tis as with lightning caught—
Over, under, lands or seas,
To the far antipodes;
Here again, as soon as gone,
Making all the earth as one;
Moscow speaks at twelve o'clock—
London reads ere noon the shock.”



O all the marvels of our time, the most marvellous is the subjugation of the electric fluid, that potent elemental force—twin brother of the fatal lightning—to be our submissive courier, to bear our messages from land to land, and “put a girdle round the earth in forty minutes.”

THE HISTORY OF THE ELECTRIC TELEGRAPH

includes three distinct periods. The first of these embraces the earliest observations of electrical phenomena, their classification, and the inquiry into their physical causes. The second begins with the first suggestion of the application of electricity to the transmission of intelligence, and includes the experiments with frictional electricity. The third period dates from the discovery of galvanic electricity to the present time. Our space will only permit us to make a brief reference to each.

The phenomenon of electrical attraction produced by friction of bodies was, in some instances, known to the ancients. It was first noticed about six hundred years before the Christian era by Thales of Miletus. He observed that when amber was subjected to friction it acquired the power of attracting light substances, such as bits of feathers; and on this account was led to attribute to it a species of vitality. The next mention we find is that of Theophrastus, who, three hundred years later, observed that a hard stone (supposed to be tourmaline) when rubbed attracted straws and little pieces of sticks in its vicinity. Pliny (A.D. 70) as well as other naturalists, both Greek and Roman, left behind them several accounts of electrical phenomena. From Thales to the seventeenth century is a long period, and yet it was not until then that there was any systematic inquiry into the subject of electricity.

The first discovery which we have on record of the power of transmitting the electric fluid to a distance through an insulated wire is that of Stephen Grey, a pensioner of the Charterhouse. Grey, having succeeded in electrifying a glass tube open at both ends, was

desirous of finding out whether he could obtain the same result if he stopped up the ends with corks. His experiment succeeded, and he was surprised to find the corks also highly electrified. From the communication of electricity from tubes to corks, Grey was led to transmit it through strings and wires; and in 1727 we find him employing a wire 700 feet long, suspended in the air by silk threads, to one end of which he brought his excited glass tube, whilst another person at the other end observed the electrification.

In company with his friend Wehler, he discovered also the insulating properties of glass, silk, hair, and resin, besides some other bodies.

In 1746 the three philosophers of Leyden produced the jar which still in name perpetuates the place of its discovery. The discovery came very opportunely for the experimenters in the transmission of electric power. It soon became one of the chief instruments in the hands of the students of electricity. Laying aside, however, the phenomena of shocks and sparks, the investigations which most claim our attention are those which relate to the transmission of electricity to long distances.

Watson, in 1747, stretched a wire across the Thames over old Westminster Bridge. One end was fixed to the exterior coating of a Leyden jar, the interior coating being connected to earth through the body of the experimenter, and the other end held by a person who grasped an iron rod. The moment the latter dipped the rod into the river, both felt a shock. This was an important discovery, inasmuch as it involved the principle on which depended all subsequent experiments on transmission to a distance. Watson repeated his experiments on several occasions—the last time near Shooter's Hill, with two miles of wire; and the now familiar fact that observers, however far apart, feel the shock at the same instant, then excited a degree of astonishment bordering on incredulity. Franklin's famous kite experiment, which proved the identity of lightning and electricity, may be regarded as the climax of electrical discovery in the past century.

But up to this time the experiments had been conducted without a suspicion of the glorious results to which they were leading. And even in the hands of the ingenious and original Franklin, we do not find that the idea suggested itself to him to apply the power he found capable of being felt at the end of a wire of considerable length, to the communication of intelligence.

ADOPTION OF VOLTAIC ELECTRICITY.

The telegraphs just noticed failed, because they were worked by *statical* or *frictional* electricity—that is, electricity obtained by friction or from Leyden jars. This kind of electricity is remarkable for what is called its *tension*, or tendency to fly off from its conductors. It is an agent not to be depended on or held in control, and proves itself often capricious, from various causes, some of them inappreciable; among the known, damp is the most influential. Hence the realisation of electric telegraphs on a large scale was essentially

impracticable. Signals, it is true, might have been transmitted within a building, but not for miles out of doors, in all weathers. For the further development of telegraphy we are indebted to dynamic electricity, or electricity without tension—that is, without a tendency to abandon the conductors along which it travels. Its phenomena, when compared with those of frictional electricity, are much more striking and interesting.

In the whole history of accidental discovery, there is no event more remarkable than that by which that other form of electricity, known as galvanism, was brought to light. It may be proved that this immortal discovery arose in the most immediate and direct manner from a slight cold with which Madame Galvani, wife of the Professor of Anatomy at Bologna, was attacked in 1790, for which her physician prescribed her *frog broth*. Frogs were provided for the purpose, skinned, washed, and laid upon a table in the laboratory of the Professor to await the moment when they were to undergo the culinary operation. Whether this operation was to be performed in the laboratory is not said; it is certain, however, that Madame Galvani was there with one of the Professor's assistants, who was at the moment engaged in some experiments with a large electrical machine which stood upon the table. Whenever the assistant, in the course of his experiments, took sparks from the conductor of the machine, Madame Galvani was astonished to observe twitching resembling life in the limbs of the dead frogs. She called the Professor's attention to the fact; he repeated the experiment, and with the same result. But without intending it, he went further than this, and found that the limbs of frogs could be excited as well by means of good conductors as by a machine. The power was present, and required only an efficient cause to develop its action. After numerous experiments he discovered that a metallic communication must be established between the nerves and the muscles. Thus was the galvanic fluid, Nature's most powerful agent in all her operations on the surface of the globe, made known to man. Shortly afterwards Volta, another philosopher, repeated Galvani's experiments, and discovered that electricity was developed by the mere contact of metals; and conceived the idea of constructing what has since, from the name of the inventor, been called the Voltaic pile. At first it was a circle of small cups partially filled with salt water, and containing plates of silver and zinc connected by wires. It was subsequently modified into its present form—a pile of alternate disks of zinc and copper kept separate by the interposition of disks of pasteboard moistened in an acid solution. The chief merit of Volta's discovery was that it demonstrated the fact that the principle of the phenomena observed by Galvani was in the metals themselves, and not in the nerves of the animal. In short, the cause of the movements he had noted was simply a current of electricity passing along the nerves and muscles. This gave rise to the term Voltaic electricity, and finally led to the perfecting of the electric telegraph.

THE STEPS IN THE PROGRESS OF THE SYSTEM

before that perfection was arrived at our space will not allow us to notice. To enumerate the names only of those who have advanced the science of electro-magnetism, apart from any mention of their labours, would fill a long list. The electric, electro-magnetic, or magneto-electric telegraph having now been made possible, the possibility was not allowed to remain barren of results. The credit of having made the electric telegraph an actual and accomplished fact and rendered it practical for everyday use, is said to be due to Mr. Cooke and Professor Wheatstone. One day Mr. Cooke happened to witness some experiments which were made by Professor Möncke, to illustrate the feasibility of electric signalling. A current of electricity was passed through a long wire, and set a magnetic needle at the end quivering under its influence. The experiment was a very simple one, and not at all novel; but Cooke had never paid any attention to the subject before, and was much struck with what he saw. He became strongly impressed with the possibility of employing electricity in the transmission of telegraphic intelligence between distant places. From the day he witnessed the experiments in Professor Möncke's class-room, he foretook the dissecting-knife, threw aside his modelling tools, and applied himself to the realisation of his conception. With such ardour and devotion did he labour, and such skill and ingenuity did he bring to the work, that within three weeks he had constructed a telegraph with six wires, forming three complete metallic currents, and influencing three needles, by the varied inclination of which twenty-six different signals were designated. In that short time he had also invented the detector, by which injuries to the wires were readily traced, and the alarm, by which notice is given at one end of the wire that a message is coming from the other. Both these contrivances were of the utmost value, and are still in use. Soon after having invented his telegraph, he came over to London, and spent the rest of the year in making a variety of instruments, and in efforts to get his telegraph introduced on the Liverpool and Manchester Railway. He found an obstacle to the complete success of his mechanical telegraph in the difficulty of transmitting to a distance sufficient electric power to work the electro-magnet upon which its action depended. A friend advised him to consult Professor Wheatstone, then known to be deeply engaged in electrical experiments with a view to telegraphy, and accordingly an interview took place between them in 1837, which resulted in a regular partnership. Wheatstone had already advanced towards a more perfect construction than that of Cooke's. He was, however, somewhat backward in the mechanical parts of the scheme, and the meeting between him and Cooke was therefore of the greatest benefit to both. They supplied each other's deficiencies. Before their combined genius all difficulties vanished, and in June of the same year they were able to take out a patent for a telegraph with five wires and five needles. Shortly after the taking out of a patent,

wires were laid down between Euston Square Terminus and Camden Town Station, on the North-Western Railway; and the new telegraph was subjected to trial. Late in the evening of the 25th July, 1837, in a dingy little room in one of the Euston Square offices, Professor Wheatstone sat alone, with a hand on each handle of the signal instrument, and an anxious eye upon the dial, with its needles as yet in motionless response. In another little room at Camden Town Station, Mr. Cooke was seated in a similar position before the instrument at the other end of the wires. It was a trying, agitating moment for the two inventors. How Wheatstone's pulse must have throbbed, and his heart beat, as he jerked the handle, broke the electric current, and sent the needles quivering on the dial; in what suspense he must have spent the next few moments, holding his breath as though to hear his fellow's voice, and almost afraid to look at the dial lest no answer should be made; with what a thrill of joy must each have seen the needles wag knowingly and spell out their precious message—the "All's well; thank God!" that flashed from heart to heart, along the line of senseless wire. The practical working of their patent, of course, revealed many defects. The number of wires required rendered its working exceedingly costly. They, however, have effected various improvements, and it may be said, perhaps, that though there have been a thousand and one other contrivances of a similar kind patented since Professor Wheatstone and Mr. Cooke took out their patent, it is doubtful whether, for practical purposes, the original apparatus, with the improvements which its own inventors have made on it, is not still the best of them all.

The rapidity with which the telegraph has spread is only equalled by the wonderful things which it renders possible. From being used merely to carry railway messages, the telegraph was brought into the service of the general public, and so quickly was it appreciated that in about twelve years after the first patent had been taken out there were three thousand miles of magic wire talking in the United Kingdom. In 1852 the length of line (averaging four or five wires each) was 4000 miles, supported by 80,000 poles, and worked at 300 railway stations. By the year 1861 the United Kingdom was credited with 11,000 miles, comprising 50,000 miles of wire. Coming down to 1865, we find an estimate to the effect that there were 15,000 miles of line; that these were made of 62,000 miles of wire; that there were 900 telegraph stations; that the Companies had spent £2,500,000, of which £400,000 was for the purchase of patented inventions; that they transmitted 2,500,000 telegrams in the previous year; that these telegrams brought in £500,000; and that the working expenses were 65 per cent.

The achievements of other nations in spreading the electric wires over the face of the earth we must leave, as well as what all have been doing, at home and abroad, in carrying the wonderful messenger through seas and oceans. Suffice it to say that before long the British Government in the metropolis will be enabled to convey its

instructions in a few hours to the administrative authorities in every British Colony. And then the words which the poet puts into the mouth of "Puck" will be nearly realised in a sense the poet never dreamed of—"I'll put a girdle round the world in forty minutes."

The success that has attended the progress of electro-telegraphy has, as is usual in such cases, called up a host of claimants to the various inventions or discoveries. No one person, however, let it be now distinctly admitted, invented the electric telegraph. Properly speaking, it had no inventor; it grew up little by little, each inventor adding his little to advance it towards perfection.

AN INDUSTRIOUS AND USEFUL LIFE.



R. WILLIAM SCHAW LINDSAY, who died Aug. 28, 1877, was a notable exemplar of the virtue of self-help. He was born in Ayr sixty-one years ago. At fifteen he left his home with only a few shillings in his pocket to go to sea, and worked his passage to Liverpool by trimming coals in a steamer. He had not a single friend in that port, and for seven weeks he was utterly destitute. At last he obtained employment as a cabin-boy on board a West Indianman. He underwent many hardships, but bore them so well, and performed his duties so satisfactorily, that by the time he was eighteen he was made second mate; a year later he became chief mate, and before he had completed his nineteenth year he was appointed to the command of a merchantman. One would have thought that after such remarkable success Lindsay would have felt that a seafaring life was the one of all others destined for him. Yet in 1837, before he was of age, he left the sea, and four years later was appointed agent for the Castle Eden Coal Company, in which capacity he was mainly instrumental in getting Hartlepool made an independent port, and he rendered great assistance in establishing its docks and wharves. If Hartlepool had been then, as it is now, a parliamentary borough, it would, no doubt, have elected him. As it was he had to look out elsewhere when, after having gone to London and established a great shipping business there, his ambition prompted him to enter Parliament. He offered himself for Dartmouth in 1852, but lost the election by eleven votes. He was more successful when, two years later, he offered himself at Tynemouth, and won the election by seventeen votes. In 1857 he was re-elected without a contest. In 1859 he stood for Sunderland, and beat George Hudson, the ex-Railway King, by a large majority. By 1865 his years of incessant toil had so told upon his health that at the general election of that year he did not seek re-election, and did not afterwards re-enter Parliament. He was the author of "A History of Merchant Shipping and Ancient Commerce," an able and interesting work in four volumes.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

MAY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
5 The Saviour lifted up	John xii. 20—36...	ver. 32.
12 Humility taught.....	John xiii. 1—17 ...	Matt. xviii. 4.
19 Christ's Words of Comfort	John xiv. 1—14 ...	ver. 2.
26 The True Vine	John xv. 1—11	ver. 5.

AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
5 The Captivity of Judah...	Jer. lii. 1—16	Isa. lix. 2.
12 The Captives in Babylon	Dan. i. 1—17	Ps. cxi. 10.
19 Nebuchadnezzar's Dream	Dan. ii. 36—49.....	ver. 47.
26 The Fiery Furnace.....	Dan. iii. 8—30.....	ver. 17.

JUNE.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
2 The Holy Spirit promised	John xvi. 1—15 ...	xiv. 16.
9 The Interceding Saviour.	John xvii. 9—26...	ver. 15.
16 The Dying Saviour	John xix. 25—42...	Isa. liii. 5.
23 The Risen Saviour.....	John xx. 19—31 ...	Rom. iv. 25.
30 The Ministry of Jesus	Heb. ii.	ver. 9.

AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
2 The Handwriting on the Wall, Dan. v. 1-6, 13-31		ver. 27.
9 Daniel in the Lions' Den.	Dan. vi. 1—23.....	ver. 22.
16 Daniel's Prayer	Dan. ix. 3—19.....	ver. 9.
23 The Decree of Cyrus	Ezra i.	Isa. xl. 2.
30 Review of the Quarter's Lessons.		

BIBLE QUESTIONS.

1. WHAT was requested of Christ in the wilderness?
2. Who foretold a famine to occur during Claudius Cæsar's reign?
3. Where did Moses pray God to stop burning the children of Israel?

4. What is the most excellent spiritual gift?
5. What prophet rebuked Asa, king of Judah?
6. Who killed the giant Ishbi-benob?
7. What servant of the king of Syria did Elisha cure of leprosy?
8. What name was given to the city of Laish?
9. What king rose against Israel during the reign of Menahem?
10. What woman received the spies sent by Joshua?
11. What king did Samuel kill in Gilgal?
12. What type of Nebuchadnezzar's reign was sent to the five kings?

The initials of the answers form an injunction of Christ to His disciples.

JUVENILE MISSIONARY MEETINGS.

SILVERDALE, NEWCASTLE-UNDER-LYME.

Dear Sir,—We held our Annual Juvenile Missionary Meeting on Sunday evening, February 17th, 1878. Mr. J. Rowley presided. number of recitations were rendered by the scholars, and a short address was given by Mr. J. Fisher. A selection of hymns was also sung by the children, conducted by Mr. James Pickin, and accompanied on the organ by Miss Rowley. The audience was large, and was well pleased and interested with the various efforts of the scholars. Our collections are hardly as large as last year, but, considering the state of trade, &c., we have much cause for thankfulness. The following is the report as read by the secretary :—

Collected by Books and Cards—

	£	s.	d.		£	s.	d.
Miss Rowley ...	1	15	7	Mr. John Heeks ...	0	9	2
Taylor ...	1	15	0	George Morrall ...	0	6	2
E. Lawrance ...	0	11	0	Joshua Ford ...	0	3	0
P. A. Statham ...	0	8	1	Charles Mullineux ...	0	2	6
F. O. White ...	0	7	0	Thomas Hamner ...	0	2	6
F. Stanyer ...	0	6	8	George Taylor ...	0	2	6
M. E. Lawton ...	0	3	7	Albert Statham ...	0	2	0
M. A. Rowley ...	0	2	9	David Lawrance ...	0	1	9
A. Symons ...	0	2	3	Henry Small ...	0	1	6
Laurie Lawton ...	0	2	2	William Ford ...	0	1	6
Elizabeth Basford ...	0	2	0	William Weaver ...	0	1	6
Annie Pickin ...	0	1	11	George Simcock ...	0	1	4
Hannah Statham ...	0	1	7	Caleb Pickin ...	0	1	1
Jemima Edwards ...	0	1	7	D. Whitehouse ...	0	1	1
Ann Wrench ...	0	1	6	Thomas Davis ...	0	1	0
Charlotte Simons ...	0	1	4	Smaller amounts ...	0	2	11

Collection at Meeting, £4 15s. 2½d. Total, £13 0s. 3½d.

W. ROWLEY, Secretary.

PRINCES END, TIFTON.

We held our Annual Juvenile Missionary Meeting in the chapel on Sunday evening, March 24th, 1878. Our esteemed friend Mr. John James presided, and there was a good attendance. The secretary gave an outline report of our general mission work, and also read the report of the local effort, which showed that, notwithstanding the almost unparalleled depression of trade in this district, the mission funds had not been allowed to suffer.

The meeting was also addressed by the Rev. W. H. Alcock, Mr. John Gould, and Mr. John Smith, who earnestly discussed various phases of mission work.

The financial result, as will be seen by the annexed report, was far in advance of any previous year. This is attributed to the judicious distribution of collecting-boxes in the houses of our friends. We hope in the current year to be able to place even more boxes, and wish, we trust, equally satisfactory results.

The following recitations were given during the evening:—

"The Connexional Armada" ...	Edward Eades, Jun.
"The Pretty Story" ...	Lois Bishop.
"Our China Mission" ...	George Samuel Cole.
"Story of Wong-ku-taik" ...	Annie Stanway.
Address from the "JUVENILE," No. 4	William Whitehouse.
"Who is my Neighbour?" ...	Mary Ann Hinsull.
"Work and Wait" ...	Martha Ann Cole.
Address from the "JUVENILE," No. 2	Richard Atwood, Jun.

REGENT STREET SUNDAY SCHOOL, PRINCES END.—JUVENILE MISSIONARY
EFFORT, 1878.

<i>By Boxes—</i>	£	s.	d.		£	s.	d.
Young Men's Select Class	0	3	8	Fanny Griffiths	...	0	2 4
Young Women's do.	0	6	1	Annie Stanway	...	0	2 4
First Class of Boys	...	0	1 10	Alice Nicholls	...	0	2 3
Boys' School	...	0	5 11½	Sarah Gwinnutt	...	0	2 1
Girls' do.	...	0	6 8	Sarah Gallear	...	0	2 0
Frank Lowe	...	1	17 0	Annie Fisher	...	0	1 8
Mary Pincock	...	1	7 6	Mary J. Bissell	...	0	1 5
Martha Ann Cole	...	1	6 4	Eliza Rich	...	0	1 4
Walter James	...	1	6 0½	William Whitehouse	...	0	1 4
Hannah Gould	...	0	14 0	William Woodall	...	0	1 3
Edward Eddes	...	0	12 9	Phoebe Perks	...	0	1 2
Daniel Williams	...	0	3 8	Sums under 1s.	...	0	6 1
<i>By Cards—</i>				<i>By Public Collection</i>		4	2 8
Lois Bishop	...	0	6 8			15	10 1
Myra Hillman	...	0	5 2	Expenses	...	0	18 9
George Cole	...	0	5 2			£14	11 4
Annie Bailey	...	0	4 2				
Samuel Onions	...	0	4 2				
Mary Ann Hinsull	...	0	2 10				
Sarah Partridge	...	0	2 6				

THOMAS PINCOCK, Secretary.

OTLEY, BRADFORD.

Dear Mr. Editor,—Nothing gladdens the heart of the Christian more than seeing the rising generation “growing in grace and wisdom,” and when we see a class of juveniles giving their time and talents to promote the Kingdom of the dear Redeemer we can but rejoice. In this pleasure the friends of our Sabbath School participated on Sunday afternoon, February 24th, when our Juvenile Missionary Meeting was held. Mr. T. Whitaker, of Armley (late of Otley), presided and, after singing and prayer, gave an excellent address, at the conclusion of which the secretary was called to read the report. The meeting was afterwards addressed by Messrs. E. Greenwood, W. Lowler, and G. Thornton. Several of the scholars recited a number of appropriate pieces in a manner which did them and their teachers great credit. Some beautiful hymns were sung at intervals, under the able leadership of Mr. E. Whiteley. The audience was larger than for several years past, and manifested great interest in the whole of the proceedings. The monetary result, all things considered, was very good. Collected by cards—Ada Whiteley, 17s.; Clara Fishburn, 7s. 6d.; Hannah M. Naylor, 7s. 2d.; John H. Waime, 6s.; Lena Pawson, 5s.; Second Class of Girls (3d. per week for three months), 4s.; Ada Foster, 3s. 2d.; John R. Spruce, 2s. 7d.; Louisa Johnson, 2s. 1d.; George Perry, 2s. 1d.; Annual Collection, £1 15s. 2d. Total £4 11s. 9d., being £1 19s. 3d more than last year. The children are evidently interested in the good work. How pleasing must this be in the sight of Him “Who will have all men to be saved, and to come unto the knowledge of the truth.”

W. WAIME.

Memoir.

—o—

JANE JOHNSON

Was born at Flint, Feb. 18, 1862. As a child she was very delicate—one of those flowers which seem too frail to bloom on earth, and are more suited for the milder clime of heaven. While she was yet of tender years her parents removed to America, and thence again to Flint, where her last days were spent. She was a very conscientious girl, upright in her deportment, and amiable in her disposition. She avoided all levity of speech, was gentle, unobtrusive in her behaviour, and thoughtful and truthful among her juvenile associates. At the Sunday school she was very regular in her attendance as long as health permitted, and also very attentive. In any meeting belonging to the Sunday school she always took an active part. In her last affliction she was happy, putting herself into the hands of God, believing that His will would be the best. She sang with a surprisingly clear voice that beautiful hymn—

“Safe in the arms of Jesus,
Safe on His gentle breast,
There by His love o’er shaded,
Sweetly my soul shall rest.”

another—

“Now wash me and I shall be whiter than snow.”

The last week of her illness she was speechless, when her happy spirit took its flight to be with God, which is far better. She died January 24, 1878, and was followed to the grave by a large number of teachers and scholars, singing on the way, and around the grave, some of her favourite pieces. May our end be peaceful like hers.

ANN E. SPENCER.



H O M E .

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HOME.



WHAT a sweet word is home ! And why ? Because it is the name of the happiest place on earth. And why is home a happy place ? Well, not because it is a fine and grand building, its rooms filled with costly furniture, and its walls adorned with beautiful pictures. Home is a happy place because it is the abode of kindness and love. There are father and mother, brother and sister, and other friends and relatives who love us and whom we love. It is the family that makes home, and a loving family makes a happy home.

But the happiness of home is not always without some drawback. This is found sometimes in *sickness*. When it comes it mingles sorrow with our joy. There is anxiety and solicitude about the sick one which keeps us from being perfectly happy.

And then *absence* often diminishes the happiness of home. As children grow up they have to leave for school, or to learn some trade as a means of gaining a livelihood. And then parents, and brothers, and sisters feel home dull without the presence of those whose conversation makes home cheerful.

But probably the absent one is the father. His business takes him from home, perhaps many miles, and for a long time together. Probably he is one of those who go down to the sea in ships, and do business in great waters. Then the thought of him being so far away, and exposed to so much peril, often gives sadness. Still he is not forgotten on that account.

What the artist intended when he drew the picture we give this month I cannot say. But I can suppose the father of the little boy is a long way from home, and has been from home a long time, and that he may not forget his father he is being shown a likeness of him by his mother. The boy cheerfully turns from his play, from his horse, and sword, and ball, to look at his father's face, and hear his mother tell of his goodness and love. And so he loves his father for what his mother says of him, and when he comes home he will get not the least welcome greeting from his little boy.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 107.

FROM MRS. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne,
May 30th, 187—.

MY DEAR BEN,—

We duly received your letter yesterday. You will be glad to know that your little friend Ernie arrived here safely with your father just before tea on Friday. He was a little wearied by the long ride, but does not seem to be any the worse for it.

He is such a dear, gentle, little thing, and has already become quite a favourite with Clara and Helen, who at present think of nothing else but amusing and interesting him in various ways.

As for Bob, you needn't trouble to ask him to be kind to little Ernie. He has taken to him wonderfully, and evidently thinks Bob a very grand fellow. He has wheeled him out a little way each day since he came, and early this morning Bob tramped off to Upleigh Wood and brought a great bough of May blossom for him. He was delighted with the beautiful sweet-scented bloom. I'm afraid I shall get jealous of Bob's influence over our little visitor, for he would far rather be in the coach-house, stable, or kitchen than in our sitting-room. He is quite amazed at the number of your rabbits, and is never tired of watching them. Your sisters have each made over to him a bantam chicken from their stock, and if the fowls could have eaten all the crumbs and barley that Ernie has offered them since they passed into his possession, they would have been as big as barn-door fowls by now.

But I must come to an end. Your father will be here in a few minutes and will no doubt want his tea, so with love from us all to yourself and your friend, I remain, your affectionate MOTHER.

Letter No. 108.

FROM BEN BARLOW TO CHARLIE THORNTON.

Waterside House, Worcester,
June 4th, 187—.

MY DEAR CHARLIE,—

I got your letter over a week ago, and as to-day is Whit-Monday, and a holiday, I am able to reply to it. We are off for a good run this afternoon across country. We mean to have a long row on the river; but at holiday time the boats are in such great demand for excursionists that the Doctor advised us not to go on the water to-day.

But I am forgetting your letter, don't imagine I am not interested in your good fortune. I am as much pleased at your second advance as I am surprised at your getting it so soon. Ted Instone says you are getting on a lot faster than his brother did for the first two or three years at the office he is in.

Your progress almost makes me feel a bit ashamed. Here I am getting nothing, but costing father a lot for board and education, to say nothing of the clothes I am always wearing out or tearing to pieces. While you are already earning more than would keep you, and in a fair way to make a good position for yourself in a few years' time. I really don't know what father will make of me. I must have a talk with him in the holidays about it.

I suppose you have heard that Ted's younger brother is at my father's. Won't it be grand if he gets strong and well after being an invalid from a baby? Wasn't it strange that, though each of the doctors they consulted years ago said he would never be able to walk, directly my father saw him he thought there was a possibility of his recovery?

Of course you are having a Bank holiday to-day. I wonder where you are gone for a trip, or if you are playing at cricket on the common. When you have leisure pray report yourself.

The dinner-bell is just ringing, and as we start first thing after dinner, I must put this in the post-bag at once.

With kind regards to your father and mother, I remain, my dear Charlie, yours ever truly,

BEN BARLOW.

Letter No. 109.

FROM ERNIE INSTONE TO BEN BARLOW.

Woodburn,

Jeun 4th, 187—.

MY DEAR MASTER BARLOW,—

I haven't had time befoar to tel you ow hapy I am hear. But your Bob has gon out this afternoon, and so I cudnt go intoo the Coche-hous, and I thawt I wud rite to you and Ted.

Yoor Papa, Mama, and Sisturs ar so gud and kind to me, that I shud'nt wont to go Home never agenenymore, if my Papa and Mama and John and Ted cud come everyday to sea me.

Yoor Bob is a gud Fello two, he carrys me abowt enywhere I like, and shose me the Rabits and Fowl and the Poney and every-think. And he weels me in my chair, and brings bootifle Flowrs out off the fields for me.

Yoor gud Papa ses he's sure I shal get all rite. I think I'm better allredy. Thank you for yoor box of Cullers. I have panted a good deal with them. You wudn't think what bootifle Fowl yoor too Sisturs have givn me for my self. Thay are such funny little

things. Please giv the other letur insid to our Ted, with love to you Bothe, I remane, yours truely,

ERNIE INSTONE.

Letter No. 110.

From TOM BLUNT to BEN BARLOW.

Old Mill, Woodbourne,

June 6th, 187—.

DEAR BEN,—

Have you heard from Bob of our success? I daresay not, for he isn't very quick with his pen, and I know he was busy yesterday.

Well, on Monday—it being Whit-Monday—there was a grand temperance fête in the public park at Hammerthorpe, and among other things there was a silver-mounted piccolo offered as a prize to the leader of the best drum and fife band, whether total abstainers or not. So we persuaded Mr. Jones to enter our band for the contest. There were six others competed, and we all played three pieces:—"The March of the Men of Harlech," "Bonnie Dundee," and "Rule Britannia." After we had all played, the judges retired for an hour to consider, and when we were called together again they announced that the Woodbourne school band had won the prize.

Of course Mr. Jones had the piccolo. It is a real beauty both for tone and appearance. He wanted to pay the value of it and share the money among us, for he said we had helped to win it, but of course we would not hear of such a thing. It seems we won the prize on account of the excellent time we kept, and Mr. Jones says it is your Bob that has made us such strict timekeepers.

I expect you will have an opportunity of hearing us in the holidays. Our Sunday School Committee are going to give the annual school treat in July. They don't know where yet, but they were so pleased with our playing at the Band of Hope meeting that they want to engage us to accompany the excursion.

I see your father has got little Instone at your house. What a queer little customer he is! He sometimes talks like an old man, but he knows less than a child about animals and birds, and such like things. I have invited him to come up to the mill one of the afternoons. Bob says he will carry him up. I will show him over the mill and the granaries, and will let my rabbits have their fling a bit for his amusement.

Remember me to Instone, and believe me, yours truly,

TOM BLUNT.

Letter No. 111.

From BEN BARLOW to BOB.

Waterside House, Worcester,

June 10th, 187—.

DEAR OLD BOB,—

I hear from Blunt that you managed to win a prize on Whit-

Monday by thumping that big drum of yours. Well done! I wish I had been witness of your triumph.

Little Ernie tells me how good you have been to him. I am very glad he has come to Woodbourne, where there is so much to interest him at the same time that the fresh air is doing him good. I expect he asks some funny questions sometimes. You see he has never been in a farming district, and as his health prevented him learning to read, he doesn't know much about such things.

I suppose I shall be coming home for the holidays in about another fortnight. I hope the cob is in good trim; I shall want to be on his back a good deal when I do come. If I don't practise well in the holidays I shall forget how to ride.

With kind regards, I remain, yours very truly, BEN BARLOW.

P.S.—My friend Ted sends his regards to you. He thanks you very much for your kindness to Ernie.

Letter No. 112.

From BOB to BEN BARLOW.

Woodbourne,

June 15th, 187—.

DEAR MASTER BEN,—

I am obliged for your last letter. I am glad to say we are all pretty well here, from your Father down to the rabbits and the foul, eksept old Carlo, who, I am sorry to say, is suffering from having interfeared with a big drover's dog last Saturday. He got severely punished for his impudens.

Little Master Ernie and me are great friends. I took him up to Master Blunt's last Saturday afternoon. I thought he would almost jump out of his skin to see the rabbits running about the yard like they did, and to see the mill-wheel and all the work inside.

Your father has had a seat made on purpose in the trap, so that I can take Master Ernie a drive now and then. I took him round Upleigh Wood this morning. It seems to do him more good than anything else. He has only been here a little over a fortnite, and I'm sure he is stronger all ready, and his happytite is better. His father was here on Tuesday. He was delighted to see how lively his little son was.

Do you think I get on with my learning? I never missed going to the night school as long as it was kept up, and Mister Jones says he believes I may learn to *spell* some day if I keep at it. I am getting on better now, because Master Ernie is in the same spelling book as me, and we do lessons together, and your sister, Miss Clara, she tells us when we are rite.

We shall all be glad to have you home again when your holidays come. Some of the boys in the band were talking about you the last practice night.

With my duty to Master Instone, and love to you, I remain,
your obedient servant, Bob.

Letter No. 113.

FROM BEN BARLOW to ERNIE INSTONE.

Waterside House, Worcester,

June 17th, 187—.

MY DEAR ERNIE,

Many thanks for your interesting letter. I am very glad indeed to hear that you are making yourself so comfortable at our house. I hope you won't be afraid to do anything or ask for anything that will make you happier. I am sure father and mother will do all they can for your good.

Isn't Bob a good fellow! And he's such a capital manager of live-stock—horses, dogs, fowls, rabbits, or anything else. What do you think of my rabbits and pigeons? Aren't they a prime lot!

In about a week I shall be coming home for my holidays, and then won't we have some fun! I shall bring Ted with me to see you before he goes home. He can stay a day or two at our house.

He joins me in love to you, I am, yours very truly,

BEN BARLOW.

THE PRISONER'S CHILDREN.

By MRS. MELDRUM, *Author of "NED'S SEARCH."*

CHAPTER VI.—FRESH EFFORTS.



UT on the morrow Lucy's attention was too much engrossed by the consideration of ways and means to be free for further instruction.

"What are we to do, Willie?" she asked, despairingly. "There's next to nothing left to sell, and no money to buy more with, and hardly anybody comes for anything."

"Well," said Willie, whose spirits were none the worse for his clean clothing, "you take some of the things out in a basket like Jennie Dawes used to, and get people to buy 'em outside if they won't come in for 'em, and then we'll buy more again with that money, and——"

"But won't you mind bein' left alone all the time? I think you might as well go along too; nob'dy'd make game of you while I'm there, I'll take care of that."

So after making the best selection they could from their little store, the two children set out together, Lucy carrying the basket and Willie slowly pushing himself along by her side.

It was not often they had been out together farther than the end of their own street, and as Willie carefully avoided the way to school, they were soon in new ground, and chatting away gaily about all they saw. All the time, too, Lu was watching eagerly for a possible purchaser, though she could not summon courage to accost anyone.

"Let's sit down a bit, Lu; Jennie Dawes used to sit on the steps sometimes, perhaps someone'll come to see what we've got."

Accordingly they seated themselves on a jutting flag and waited. Not long, however, for presently a woman appeared carrying a baby and encouraging with cheery words a wee toddling child who was holding by her dress.

"Come along, Rosie, there's a good girl."

But Rosie's bright eyes had spied out the cakes in Lucy's basket, and loosing her hold of her mother's dress, she pointed to them eagerly, exclaiming, "Me want dem."

Fearing to lose an opportunity, Lucy got up shyly, holding out a brown pasty-looking bird with currant eyes. "It's only a ha'penny, ma'am."

The mother stopped, felt for a penny, and taking two of the cakes put one in her pocket and the other into Rosie's hand. She had not been long out of sight when a man bought a short pipe, then a boy a pennyworth of nuts, and in the course of two or three hours the basket was empty and the children set off home in high glee.

With all the zest of success, Lucy set to work again to refill her basket for the next day's venture, and then the two went up to Mrs. Kelly's room to communicate the good news.

"Well, now, that's fine," said the woman as Lucy showed her gains; "but you mustn't be disappointed if it isn't always so. From what you say, I think you must have been just nigh the park gates, and I don't think you could do better than go on a few steps farther to-morrow. Bernie'll be well enough to go along with you—a breath of fresh air'll help to finish his cold off—and he'll show you the park; there'll be lots of people there, an' they'll be thirsty too, this hot weather. Take a good stock of pop with you; that'll sell."

"There's only three bottles left," said Lucy. "I'll put them in, an' hadn't I better get some more?"

"Well, yes, I was thinking, but it's over late for nettle gathering, or else I'd have made you some nettle drink, however, I'll get Kelly to get you another dozen of the pop—they'll not cheat him, and they would you most likely. Now then drink some tea, and then Bernie shall teach Willie a bit of a lesson—it'll not hurt either of them; and I'll show you how to mend these old stockings up—they'll wear a bit yet if they are done-looking."

Very awkwardly did Lucy's unaccustomed fingers ply the darning-needle, but with earnest purpose and hot cheeks she pulled it in and out till the holes were at least filled up, if not with mathematical precision, and she felt fully paid for her labour when Mrs. Kelly folded them up and gave them to her to take home for Willie.

A visit from Mr. Hill closed the day, and the children went to sleep with lighter hearts than since their father's arrest.

Early next day the three set out, and this time stayed not till they reached the park. It was well Bernard was with them, for neither Lucy nor Willie would have dared to pass the gilded iron gates or walk around the beds of brilliant summer blossoms.

"Are you sure nobody'll say nothing?" asked Willie under his breath, as he stopped before a cluster of glowing geraniums. "Oh, aren't they grand, I never see such like before!"

"Won't we get took up?" asked Lucy, fearfully.

"Who by?" laughed Bernard, to whom the park was an old playground.

"The people it belongs to. Oh, don't, let's stop, I'm frightened; aren't you Willie?"

"No, 'cause Bernie isn't," said Willie; "an' that man with a red collar didn't say nothin', did he?"

"No, of course he didn't. Why, this is *our* park just as much as any gentleman's garden is his."

"And may we have the flowers? are they ours too?" asked Willie, eagerly.

"Oh, no, 'cause you see there's so many people in, that if they might all get the flowers to-day, there'd be none to-morrow."

"No, but I would like just one," said Willie, looking longingly at the bright petals.

"Well, my little man, go down in the pasture there, and you'll find plenty of daisies and buttercups, and you may have all you can pick up."

The children started and looked round. There stood a pleasant-faced man leaning on a spade; he had evidently been working near. He nodded kindly at Willie as he caught his eye, and then turning to Lucy said—

"You must not try to sell those things inside here—it isn't allowed; but if you go just outside the gate you'll find plenty to buy."

"Don't let's go yet, Lu," begged Willie, as Lucy took up her burden and turned towards the gate.

"Oh, yes, I must; you know we shan't sell anythin' if I don't, an' that'll never do. S'pose you and Bernard go where the man said the posies was, and I'll wait for you by the gate."

"Very well;" and away went Willie, led by his friend down the broad winding path to the open fields below.

CHAPTER VII.—IN THE FIELDS.

Few of the park visitors found their way here, and the soft green turf was enamelled with countless daisies and buttercups, while the hedgerows, stunted though they were, were here and there wreathed with white convolvulus.

It was Willie's first sight of Nature's loveliness, and he would

have been well content to look and admire from his sled ; but when Bernard drew him right amongst the flowers and set him the example of gathering them, his delight knew no bounds. His thin little hands were soon filled, and he began to long for Lucy to come and share his pleasure.

"I'll tell you what," said Bernard ; "I'll go and fetch Lucy if she'll come, 'cause she may have sold up and not like to come seeking us so I'll go and see, shall I ?"

"An' leave me ?"

"Yes, you won't mind. I shan't be gone long, you know."

Willie looked rather doubtful, and his eye wandered in the direction where five or six cows were grazing not very far away.

"Why, you're not afraid of the cows," said Bernard, somewhat contemptuously ; "they won't come near you. I'm off now. Don't be a coward, Willie ; you know you want Lu."

Willie's consent was not of the freest, and he remained for some time in anxious contemplation of his four-footed neighbours. As, however, they appeared to have no designs upon him, he presently reclined on his elbow, gazing up into the blue sky, and listening to the joyous carols of the birds, the low murmur of the invisible bees, and the quiet plash of the little brook running over its pebbles. Lulled by the sweet sounds, he had almost fallen asleep when a sudden scream of fear rang out near him, and starting up he saw that one of the quiet cows was rushing wildly along—head down and tail waving—right towards his resting place.

Half way between the cow and himself was a child of some seven years, whose terrified cry had aroused him.

Willie's first instinctive thought was to flee, and with this intention he crawled on the sled, but strong as was the impulse to save himself, he could not bear to see the strange boy's destruction, and instead of rushing away he waved his wooden propellers and shouted at the top of his voice, "Run, little boy, run ! run ! run !"

Instead of running, however, the child suddenly stumbled and fell, just as the cow reached him, whereupon the animal, jumping clear over him, charged down upon Willie, who, powerless to hurry, gave himself up for lost, when all at once, without any evident reason, the dreaded foe changed its course, and cantered off to the brook, where it stooped to drink and remained knee-deep in the cool water for the rest of the afternoon.

It was not long before Willie summoned courage to go and see if the boy was hurt. He had not moved since his fall, but looked round as Willie reached him, and seeing his enemy so far away, ventured to exclaim—

"Eh, I thought it was goin' to kill me—did you see it ?"

Willie nodded.

"An' me too," he said, "but it didn't."

"What's your name ?"

"Willie Tomlins ; what yours ?"

"Mine's Willie too ; it's Willie Sharp."

"Have you got any sisters ?"

"Oh, yes, there's six of us at home."

"Six ! what a lot ! What's their names ?"

"There's Jack, an' Tim, an' Jim, an' me, an' our Sally, and the little 'un."

"What's its name ?"

"Mary."

"What's your father ?"

"Aint got none."

"Who keeps you ?"

"My mother ; she goes to mill."

"An' who minds the baby ?"

"Our big lads."

"An' what do you do all day ?"

"We plays about, me an' our Tim."

"Don't you never get washed ?" asked Willie, with a thought of the time when he too belonged to the "great unwashed."

"Yes, sometimes," answered the child, looking at his black hands with some sense of shame, "mother washes us all of a Saturday."

"Only of a Saturday ! Why, Lu washes me every day now ; she didn't use to, though."

"Why do she now then ?"

"Oh, it's so nice ! I like water—don't you ?"

The boy shook his head. "Don't like bein' washed of a Saturday ; mother do scrub."

"Do you go to school ?"

"Yes—Sundays."

"What do they do ?"

"Oh, they talk to us, and we sing."

"Sing what ?"

"Lot's o' things. Dare to be a Daniel's, one of 'em."

"Dare to be a *what* ?"

"A Daniel."

"What's a Daniel ?"

"Don't know."

"Don't you know ? What do you sing it for then ?"

"'Cause we all do."

"I wonder what it means. I'll ask Bernard ; there he is, and Lu too. Lu, this is Willie Sharp ; a cow was running after him, an' we've been talking ever since. Oh, Bernard, what's a Daniel ?"

"A *what* ?" asked Bernard, puzzled.

"He says they sing it at school. Will you sing it now ?"

Willie Sharp was not at all shy, and gave the hymn in question with an energy that delighted his audience, and caused glances of surprise from several of the four-footed animals within hearing. Bernard knew and joined in the chorus, and Lu and Willie caught the air sufficiently to chime in a little.

"Now, Bernard, tell us what it means."

"All right," and while the three listened with eager attention, the boy told them the old story of the brave hero of the Babylonian court.

"There's none of them sort of dens nowadays," said Lucy, as he finished.

"Not real lion's dens," answered Bernard; "but father says the public-houses are every bit as bad."

"Why, and so they are," said Lucy, vehemently. "If it hadn't been for them we shouldn't be as we are now."

"Well, I'm never going to begin taking anything of that sort. I can't, 'cause I'm in the Band of Hope, you know."

"What's that?" asked Willie Sharp.

"They promise not to drink wine or beer, or such like."

"I don't think there's anybody that doesn't drink, is there?"

"Oh, yes, hundreds. Why, there's more than a hundred in our band, and none of us ever mean to drink only water."

"Me an' Lucy's goin to be in it too, as soon as we get some new things to go in; Lu says so," put in Willie.

"You needn't wait for that," answered Bernard; "there's many poorer dressed than either of you."

"Or than me either," asked Willie Sharp, quickly.

"Yes, than you either. If you weren't so black, you wouldn't look amiss. Don't you ever get washed?" he added, laughing.

"Yes, he does on Saturday, he told me so just now. I say, wouldn't you like to go to the meeting too, and promise never to get drunk?"

"I think I should," he replied, slowly. "Where's it at?"

"Look here now," said Bernard; "you come here, at least to the park gates, at half-past six, or a bit before, next Saturday, and I'll take you, and perhaps Lucy'll go to, and Willie."

It was getting late now, and carefully placing Willie's flowers in the empty basket, the three retraced their steps, rejoicing in another day's success, for when Bernard had gone to summon Lucy to the pasture fields she had sold all but one gingerbread, which she afterwards divided between the two little Willies.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

XVII.—ARTS AND SCIENCES—THE TELESCOPE.



THE desire to aid the natural powers of the eye to penetrate into distance is by no means of recent date. History says that an instrument was placed upon the lighthouse of Alexandria, by which vessels at a great distance were rendered visible; and from the probability that Archimedes employed concave mirrors for the concentration of light it is more than likely that the Ptolemaic telescope was a reflector.

Without attempting a scientific description of telescopes generally, we will very briefly carry our young readers along the steps which have led to the construction of an instrument capable of defining those luminous clouds which even Herschel's grand telescope utterly failed to accomplish, although *that* could descry a cluster of five thousand stars deeper in the abyss of space by three hundred thousand times than Sirius. Indeed it was Herschel's inability to resolve a certain nebula or dark spot in the sword of Orion which led that great astronomer to the conclusion that a nebulous fluid existed in space which formed the material for future worlds.

The two kinds of telescope, known as "reflecting" and "refracting," occupy distinct pages in history. Our paper has reference to a gigantic *reflector*, and we will therefore confine our remarks to that form of instrument.

It is not until 1652 that we find any mention of the use of a lens with which to magnify the reflected image, for it must not be supposed that the image of a distant object formed in the focus of the reflecting mirror is a *magnified* image—it is only rendered brighter and clearer. The eye-lens was first employed by an Italian called Zucche, in the above-named year, and was merely held in the hand and directed upon the focus of the reflector, but we may be sure the observer's head must have greatly interfered with the rays from the distant object.

In 1663 Gregory invented his now well-known telescope, in which the rays are twice reflected before entering the eye-piece. The small second reflector is placed facing the large one in the centre or axis of the tube, and reflects the image through a hole in the centre of the large mirror.

The advantage of Gregory's arrangement is that the observer can point his instrument directly towards the object he examines, but there are several disadvantages by which much light is lost.

In 1672 the great Sir Isaac Newton, upon the day of his election as a Fellow of the Royal Society, presented the society with a reflecting telescope upon his own arrangement and executed with his own hands. It was a small instrument—of little power, less than a foot in length, and with a speculum of only one inch in diameter. This relic of the great philosopher, which may still be seen in the rooms of the Royal Society at Burlington House, Piccadilly, though of little practical use even in the early period at which it was invented, is the undoubted parent of that giant tube through which Herschel first saw Saturn shining in the midst of her satellites, and of those still more marvellous instruments for which science is indebted to the skill and energy and inexhaustible perseverance of the Earl of Rosse.

The great reflecting telescope of Herschel, completed by him in the year 1789, had kept its place for more than half a century as the most powerful telescope yet constructed. The enormous difficulties of casting and polishing the metallic speculum for instruments of so

great a size, the infinite variety of accidents to which the process is exposed, and the great cost of every failure, had long deterred astronomers even from attempting to imitate it, when, about the year 1827, Lord Oxmantown, a young Irish nobleman, who subsequently succeeded his father as Earl of Rosse, determined to devote himself to the object of constructing a reflecting telescope of even greater power than that famous "optic tube."

The greatest obstacle to the constructing of telescopes lies in the difficulty of casting and polishing the enormous metal speculæ or mirrors, which serve to reflect the rays proceeding from the object to be observed by the eye. So great was this difficulty that even Sir William Herschel, at the commencement of his career, polished four hundred of such mirrors of different dimensions, content if he could only procure one tolerably good one out of so great a number. From that period up to the time when Lord Oxmantown commenced his labours no improvement had been discovered in any part of the process. Meanwhile the great improvements which had taken place on the Continent in the art of making optical glass had brought men to the belief that the old refracting telescope had once more taken the chief place as an astronomical instrument, and that all attempts to improve the reflector were useless. Nothing daunted by this opinion, the young Irish nobleman set to work to consider what were the causes which had hitherto led to failure. He saw that the reflecting telescope had capabilities far beyond those of its rival, while its chief fault, known as spherical "aberration," was common to both. His first object therefore was to diminish this fault, in which, after many ingenious attempts, he succeeded.

Aided by his newly-trained band of workmen, Lord Oxmantown then applied himself to the improvement of the process of grinding and polishing. Scientific men among his contemporaries were of opinion that machinery would be useless for this purpose. The motto of the Irish nobleman, however, was "Try," and he did try, and moreover succeeded. He conceived the idea of employing a steam engine of two-horse power for the purpose, and he invented an entirely novel machine of great ingenuity for accomplishing the difficult process of grinding and polishing, with which, in the course of a few years, metallic mirrors were finished many hundreds of times, with a perfection altogether unattainable by hand labour.

To describe the large number of minor improvements introduced by Lord Oxmantown in the process would be impossible in this sketch. His lordship erected his first great telescope, the result of these labours, on the lawn of his seat at Birr Castle, in Ireland, and it was not long before scientific men pronounced it to be the first instrument in the world. Such was the perfection of its workmanship that Dr. Robinson, who made observations with it in 1840 with the assistance of Sir James South, declared that a large building would be easily visible with it on the surface of the moon, while, in his formal report on the subject, he observes—"It is scarcely possible

to preserve the necessary sobriety of language in speaking of the moon's appearance with this instrument, which discovers a multitude of new objects at every point of its surface."

In describing this renowned telescope in 1840, its constructor spoke of the possibility of a telescope being constructed with a speculum of six feet in diameter, or twice the size of that with which he had just astonished the world. Many denied the practicability of the project, and gave reasons why the attempt must be a failure; but the idea had no sooner occurred to Lord Rosse than he determined to put it to the test by designing a magnificent instrument with a metallic speculum of six feet, or considerably more than twice the area of surface of Herschel's great telescope. All being ready, the casting of the speculum took place on the 13th of April, 1842, at nine o'clock in the evening. The crucibles were ten hours heating in the furnaces before the metal was introduced, which in about ten hours more was sufficiently fluid to be poured. When the oven was opened the vast metallic mirror, weighing three tons, was fortunately found as perfect as when it entered. Lord Rosse shortly afterwards cast another speculum in the same way of four tons, which was the one ultimately used. This was removed to the grinding machine, where it underwent that process, as well as polishing, without any accident having occurred. Finally, in October, 1844, the enormous tube, being about forty feet in length and eight feet in diameter, was completed. It is stated that the Dean of Ely walked through the tube with an umbrella up. At Christmas, 1845, it was set up between two lofty walls of castellated architecture, and directed to that wonderful nebula in Orion we have already alluded to; and who shall tell the anxiety with which the result of that gaze was watched! Did nebulous fluid exist in space or not? That was the question to be solved. And solved it was. That fleecy cloud was *not* a vapour; it consisted of stars! Worlds, millions upon millions—who shall say not peopled with intelligent existences? But we cannot speculate. The gigantic telescope is, as compared with the human eye, as 130,000 to 1; it has a penetrating power of 500; and can render visible stars whose light would require 60,000 years to reach our earth! The whole weight of the instrument is twelve tons, and its cost to the constructor was estimated at not less than twelve thousand pounds.

It is wonderful that man, a creature of a day, can soar so far. And yet how little is revealed to us, compared to the great, the boundless sum of what remains unknown!—"What we know," said a dying philosopher, "is but a little matter; what we do not know is immense." Let it be remembered that with the greatest telescope we only see one portion of boundless space. Yes; these universes which are shown to us, brightly or dimly, are still but a part of the Almighty's works. There must be more beyond, for space is *infinite*!

As we think of this, and stand in the calm lustre of the stars, while they glitter with the same radiance which kindled the inspired

Psalmist's song, well may we exclaim—"When I *consider* Thy heavens, the work of Thy fingers, what is man that Thou art mindful of him, or the son of man that Thou visitest him?"

That Thou visitest him! Here indeed we do know something of a thing the angels desire to look into. *He visited us*—He "who is the image of the invisible God," "by whom also He made the worlds," once took our nature upon Him, and suffered for our salvation. *This we know*, and we know the will of God concerning us, and though we can make no return for His goodness, He has graciously revealed to us how we may please Him here and know Him more fully hereafter.

Hereafter, perhaps, we may find that the benefits of our Saviour's visit to this earth did, in some way, at present inconceivable to us, extend to distant worlds. Hereafter it may be our happiness to explore the distant parts of Creation, and understand their wonders in a way of which we are now incapable.

Meanwhile let us wait in filial confidence for the dawning of that Eternal Day, assured that He, who even in this life bestows so much upon His servants, is preparing for them in the "many mansions" of His house happiness such as it hath not entered into the heart of man to conceive.

Our Friend, our Father! On Thy love we rest
In this our being's feeble infancy;
By all Thy glory dazzled and oppress'd,
Helpless, yet strong if we are dear to Thee;
Erring and vile, but contrite and forgiven,
Ransomed from endless death, inheritors of Heaven.

Oh! may we serve Thee in our lowly sphere
Of faith and duty through life's transient day;
Waiting in humble hope Thy call to hear,
And gladly cast our childish things away,
To see Thy face, to dwell before Thy throne,
And Thee and these Thy works to "know as we are known."

DAISY BANK;

OR, SISTER ELLEN'S MINISTRY.

By J. CAPES STORY.

CHAPTER IX.—RICHIE'S DISCOVERY.



HE family living at Daisy Bank had returned one Sunday from evening service when Richie said to his sister—

"Ellen, did you see that boy who sat in the corner pew near the door to-day?"

"Yes, I saw him," answered Ellen, "and I thought that I knew him, and yet I could not assure myself that I did; indeed it seemed all a fancy. Sometimes the mere sight of a person

you pass in the street is enough to imprint a dim picture upon the memory, and afterwards, when by accident you meet the same person again, you fancy an acquaintance of some kind, and hesitate whether to let him pass without a nod. And that is how I felt to-day in reference to that boy."

"Ah, ah, sister, in saying that you don't know how near the mark you are. I've seen that boy several Sundays lately sitting in the chapel, not always in the same place, and I've wondered who he could be, and then to-day, as I looked at him again, I thought in an instant—Why, it's Jemmy Jortin!"

"Do you mean the boy who came to our relief when we had taken charge of the old woman's firewood?"

"Yes, none other." And Richie seemed quite elated with his discovery. Indeed, he said he had almost gone to him in the course of the service to say how pleased he was to see him there, but propriety did not allow of that; and then, when the service was concluded, the boy was out through the door and away before he could reach him.

"I am glad he has found his way to our chapel. Do you suppose anyone has spoken to him to encourage him to come again?" asked Ellen.

"I don't know, but I think Mr. Norlan will have noticed him; he seldom misses a stranger."

"What should we do without our good doorkeeper? We have no right to leave our work to him, yet how many strangers would come and go without a single kindly word if he were not there! No doubt he can give us some information about the lad; we will ask him when an opportunity occurs."

Little more was said then about Jemmy Jortin, excepting that as Minnie Maylow had come in a few moments before, Richie felt bound to inform her also of the discovery he had made, seeing that she was with them when they made the acquaintance of the donkey boy.

Minnie's visits to Daisy Bank had become more frequent since Harry went away; indeed Ellen began to look for her almost every day. When a favourable opportunity occurred, Ellen and Minnie unobserved slipped out of the house and out of the garden too. Had they turned in one direction they would soon have been amongst many people, who, in their gay Sunday attire, made this pleasant part of the town a frequent resort on these fine Sabbath evenings; people who must soon reluctantly turn their steps again towards their homes in the crowded streets, and after a night of rest, arise on the morrow to don again their working dress, to hear the factory bell once more, and then to begin with renewed strength the busy toils of life.

But Ellen and Minnie turned in a contrary direction, and went arm-in-arm along an unfrequented lane, which brought them to a little knoll by the side of the wood, overlooking the river and the country beyond. The whole scene before them was full of the yellow light of

the setting sun, now quickly disappearing below the horizon, yet still shooting up and around a glowing radiance which, striking upon light fleecy clouds hanging low in the west, produced a marvellous wealth of colour, changing every moment.

The two girls stood silently watching the glories of the sunset, their sense of Nature's wonders being accompanied by that other sweet sense of each other's presence and love.

Presently Minnie said—

"Ellen, can you tell me your thoughts?"

"Why, Minnie, I scarcely dare tell you my first thought when we came up here."

"Oh, I'm sorry; perhaps I ought not to have asked."

"Yes, I thank you for asking, for I know you ask in kindness. Only we sometimes have thoughts which give us shame as soon as we become aware of their presence in our minds, and my first thought was of that kind. You know how sad I have been of late, and to-day things have occurred both at home and at the chapel to make my sorrow even heavier. And I came out with you just now in such a dark and mournful mood that I feared you would hardly like to walk with me, and when we got out here, behold, we found all this peace and light and glory, and I thought it was cruel of Nature to be so glad and out of sympathy with me. And yet we had not been standing here long before I felt this peace and light stealing into my heart, and then my next thought was that of thankfulness for such a beautiful picture with which to finish a sorrowful day."

"So at first your sadness made you misjudge both Nature and me?" said Minnie.

"Yes, and that brought at once the feeling of shame. But it has all gone now, for I know how unreasonable was both the one thought and the other. So we will let all that pass. I know you forgive, and as for Nature—why, look! It is a different picture now, more subdued in the colouring, but as beautiful as ever. Minnie, I wonder whether Harry sees this."

"I hope he does; but do you know where he is?"

"No; only I suppose somewhere on the sea."

"Have you no idea?"

"Not any."

Minnie's eyes unconsciously kindled into intensity of expression as she put these simple questions. Feeling that something was wrong, she had not dared to ask even such questions before. Ellen had not felt at liberty to communicate more than the fact that her brother had gone away, to the great sorrow of all the family. The exact circumstances under which Harry had left his home were known to few.

Ellen could not fail to notice the subdued interest in her brother which was thus expressed by her friend. She even ventured to say that she thought Minnie also felt some regret that Harry had gone. To this, however, Minnie made no reply, only with downcast eyes she

seemed to be regarding a tiny wild flower which nestled in the turf at her feet.

Of course a silence of this kind had an eloquence of its own. But Ellen did not think well to pursue the topic thus delicately approached. Yet it was not a small joy to Ellen to know that this sweet girl should feel a kindly interest in her absent brother.

Presently the glow was gone from the sky. The last tinge of orange and of crimson melted from the clouds, and all was sombre and still.

The two girls quickly walked homewards, and Ellen, after leaving Minnie at her father's gate, was soon within the house and saying "good night" at the bedside of her invalid brother Joe.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXVII.—WONDERS OF THE SEASHORE.



CONSIDERABLE number of the inhabitants of our inland towns, where fog and smoke alternately reign for many months of the year, endeavour to make a rush to the seaside during the summer for a breath of fresh air. Many of my youthful readers will probably have the privilege of gazing on the grand old ocean, and

feeling its invigorating breezes during the next few months. It will be fitting, therefore, to draw their attention to some of the wonders they may there behold, or of which the sea may remind them. Amongst the greatest of juvenile delights are those of running along the beach by the side of the advancing waves, of picking up shells and stones, of watching the ebbing-tide, and searching amongst the rocks and in the pools for the treasures it has left behind. Of the most remarkable phenomena of the sea I have already spoken (Nov., 1876), and the grand purposes it serves in the economy of Nature. As already pointed out there is nothing accidental about it: its minutest provision has been ordained with a purpose as obvious as the adaptation of the organs of sight for seeing; and it is one of the largest as well as most beautiful illustrations of the wise and beneficent design of the Creator.

We have, however, still to notice some of the various interesting creatures that find their home in the waters, as well as the plants that flourish there, and those that bloom on the ocean's verge.

Everyone must have remarked that the profuse vegetation of the country inland grows scanty at the seashore. Ordinary flowers and shrubs are injured by the sea air, and dwindle to a very feeble kind of life if directly exposed to it. Trees close to the shore seldom attain

any considerable height, and are uniformly seen to grow best on the landward side. While this is partly on account of the storms that sweep up from the sea, it is partly also because the tree by a kind of instinct turns towards the soil and air that can best support its life. It is said that palm-trees when planted in a foreign clime look towards the home from which they have been taken. There is a basis of fact for this poetical idea, for travellers have often spoken of these trees whose feathery plumes they have seen as it were all bent looking towards their native soil. At any rate, everybody may see the trees on our sea-coasts bending away from the sea, and the foliage chiefly growing on the side towards the land. A walk, for example, from the village of Banks to the town of Southport on the Lancashire coast, will show in that flat country, where you can see for many miles at a stretch that all the high trees grow a good distance inland, and that the great majority of them have a lopsided appearance, on account of the peculiarity now noted. On most other exposed parts of the coast the same thing may be seen.

But Nature leaves no gaps to mar the completeness or beauty of her work. If ordinary vegetation will not flourish under the influence of sea air and salt spray, a new series of plants is ordained to fill its place with a structure adapted to its conditions of life. There are a great number of plants and flowers that grow on the shore out of the reach of the waves, indeed, but frequently covered with the spray dashed on them by the wind at high tides. By the existence of these plants vegetation is carried to the very margin of the great deep, where it begins again in sea flowers and plants of marvellous character. Besides a great variety of shrubs and flowers there are many kinds of grasses that will readily grow where they have nothing better than sand to rest in, and sea air to breathe. Indeed this coarse grass in many places so overspread the sand as to keep it from being blown into the eyes of persons passing by, or into houses or fields adjacent. These humble forms of vegetation are not as gay as the more splendid growths that flourish in rich soil and favourable situations, but the purpose they serve is a very valuable one. They fill up that margin that would otherwise exist where the more luxuriant vegetation shades off and ends, and where the domain of the sea begins.

Between the structures of these plants and the places where they are to live, we shall find an exact correspondence exists. Many of them, we see, flourish in sand, others in gravel, others on the rock. How can they thrive where there is no soil? How can they prosper where what little soil there is, is destitute of its most needful qualities, and possesses no moisture? Well, to begin with, their roots are not intended to supply them with nourishment, the same as the roots of other plants that grow on the land. The roots supply the plants with an anchor to hold on by, and that is all. Their nourishment they obtain by their leaves which constitute mouth and digestive apparatus, and lungs and everything. These leaves are so con-

structed as to absorb the moisture of the air very fast, and yet at the same time to allow it to be exhaled by the sun very slowly. They are filled with pores which admit the access of sun and air, and by their action on the juices absorbed, the plant is sustained and strengthened. In plants that can obtain their supply of moisture by their roots the leaves are always thin and delicate. Were it not for this modification of structure in the leaves no plants could possibly flourish in the exposed parts of the seashore. But, indeed, by needful variations the Creator has ordained that an abundant vegetation shall spring up in every part of the world, in even the most unfavourable conditions. From the hard rocks of mid-ocean where there is none to witness its beauty, and not a particle of soil to support it, to the extremes of heat and cold in tropical and arctic lands, vegetation in some form or other exists. It exists with special adaptations suited to the varying circumstances; and does not this prove that the beneficent Creator would have every part of the wide world to witness to His profuse bounty, and wise and loving care?

There are sermons in stones, and we may find much instruction in the hardy plants we have been speaking of. They dwell in solitary spots where they are never cultured by a human hand, perhaps never seen by a human eye; and they put forth their leaves and blossoms in spite of the storms that would crush a more delicate organisation. Is not their existence a silent but eloquent appeal to us? to put forth every exertion to overcome the circumstances unfavourable to the development of goodness in our lives and characters? And do they not also urge us to that happy cheerfulness and content with which the Bible bids us beautify the dullest situation in which Providence has seen fit to order our lot.

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

VI.—COURAGE AND COWARDICE.

“The wicked flee when no man pursueth, but the righteous are bold as a lion.”

“Dare to do right, dare to be true;
You have a work that no other can do.
Do it so bravely, so kindly, so well,
Angels will hasten the story to tell.”



HEROES are wanted; wanted not only for the battle-field, but for the home, and school, and Church. *Young* heroes—boys and girls with pluck and energy, young men and maidens with convictions and courage to utter and act upon them.

Courage is a quality needed not alone in the days of martyrdom; it is needed every day, and needed by the poor and

lowly, by the boy at school, the girl in the factory, the clerk at his ledger, and the true "British Workman" in every part of the country. Many a youth, with good talents and kindly disposition, is kept back and trodden down for want of a little moral pluck. Is it not still true that the fear of man bringeth a snare? It is said of one of the noblest of Englishmen—one to whom our country is vastly indebted—that his motto has ever been, "Be just and fear not." Such a man *need* not fear. The righteous are still "as bold as a lion." A man of courage will not insult the weak—"The brave man will not tread on a worm, and he will not cringe to an emperor." He will not fawn and flatter; no, he has an utter scorn for such hateful conduct. It is the blustering coward—the man who is insolent and overbearing to his supposed inferiors—who whines and cowers in the presence of his superiors. Some of these boasters are afraid of mere pigmies and shadows, yea even of their own shadows. Such would do well to give heed to the proverb—"He that is afraid of leaves had better keep out of the wood." The brave-hearted Gideon gave advice something like this to 32,000 men who gathered round his banner. He said—"Whosoever among you is fearful and afraid, let him return and depart early;" and at once 22,000 turned right-about face, and were soon at home. Only assure the true hero that the spot where he stands is the post of duty, and then, whatever terrors, perils, or foes beset him, his simple question is—"Should such a man as I flee?" Tennyson puts into the lips of one of his characters these words—

"My strength is as the strength of ten,
Because my heart is pure."

It is conscience that makes cowards of men; a sense of guilt unmans, alarms, confounds men more than anything else. The Bible has some bold and striking figures on this point. Speaking of the wicked, it says—"The sound of a shaken leaf shall chase them." The rustling leaf, driven with the wind, shall strike terror to the heart, cause heavy drops of sweat to stand upon the brow, make the knees tremble, and the face turn pale as death. When Felix only *heard* of "righteousness, temperance, and judgment to come, he trembled," because he was guilty. Boasting is common because it is cheap and easy. It need make no sacrifice, strike no blow, shed no blood, incur no hostility. A man can indulge in it while he sits in his easy-chair, smokes his pipe, and reads his paper. A young man I know just well enough to lead me to the conclusion that he is no hero, recently declared in a very lofty and bombastic style, in the presence of a large audience, that "years ago he longed to go and shed his last drop of blood for oppressed Poland." Still he has been careful not to shed even the *first* drop either for Poland or Bulgaria. A man of true courage is not always striking blows; he need not. Usually he can keep his enemies at some distance without blows. "His word is as good as another man's sword." There is no necessity for a brave man or a brave nation to go dangling sword and purse in

the face of a real or supposed enemy; not even when the sword is keen and the arm that wields it is strong, not even if in the purse there is the large sum of six millions sterling. We have all seen how weak and foolish men will sneer at and take liberties with a coward, while they treat a valiant man with respect. I suppose this is what is meant by the old saying—"The ass knows in whose face it brays." That young man who has joined the Church, but who is sadly lacking in thoroughness and valour, may expect a sorry time of it in the warehouse or factory among shallow friends and scoffing foes. Yes, the ass knows in whose face it brays. It will not bray long in the face of the lion, and if it does the lion will look on more in pity than in fear or anger.

"Ahead, then, keep pushing, and elbow your way,
Unheeding the envious and asses that bray;
In life's earnest battle they only prevail
Who daily march onward and never say Fail."

Caution is one element in the highest forms of courage. It is all right to be bold and hardy, but there is no good in being *fool-hardy*. Courage has a keen eye as well as a strong arm and a brave heart, and with that keen eye it "looks before and after." That man is not a hero who needlessly goes near to the verge of a terrible abyss, who fondles with the serpent and plays with the adder because the skin is bright and the motion is graceful. No wonder if he is bitten, and stung, and maddened. So men trifle with strong drink; they are not afraid of one or two glasses. Far better if they were afraid. Others are afraid for them. The sorrowing mother, the anxious wife, the neglected and affrighted children are afraid for them and of them. How many in England have been stung! Many who were once in our schools and churches are now poisoned in body, soul, and reputation. To all who trifle and play with this tremendous enemy, I would say, "Beware!" do not rouse a sleeping wolf, or tickle the ear of a tiger. If danger comes in the way of duty, face it manfully, resolutely, but do not needlessly expose yourself to perils by which thousands of strong men have been ruined. Let me quote another wise old adage—"That is a bold mouse that sleeps in the cat's ear." Yes, and a silly mouse too. But some men are sillier, they sleep in the ear of the dread monster called alcohol. And, oh, how sadly they are bitten and torn! "My son, if sinners entice thee, consent thou not." Being forewarned, let us be forearmed. In closing this article let me say that by courage we do not mean roughness and bluntness. The bravest of men have ever been the gentlest. While they were lion-like, they were also lamb-like. This may be seen in a moment if we look at men like David, Paul, Luther, and Cromwell. These men never quailed in the face of a foe, and yet they strove, with a woman's tenderness, to minister to the needy, comfort the sorrowing, raise the fallen, and with their strong rough hands wipe away the tears from the face of the widow, and direct the steps of the orphan. The true hero is not the man or boy who is blustering and

boastful ; who is reckless in his treatment of the rights and feelings of the weak and unprotected, and poor. Christian courage is full of the spirit of holy chivalry, while calm and fearless in the presence of powerful foes, it ever displays a thoughtful and tender regard for the lowly and feeble, and is at all times courteous and respectful toward the gentler sex. To every one of us God is now saying, "Be strong and of good courage." Quit you like men.

"Dare to think though others frown ;
Dare in words your thoughts express ;
Dare to rise though oft cast down ;
Dare the wronged, and scorned to bless.

Dare from custom to depart ;
Dare the priceless pearl possess ;
Dare to wear it next your heart ;
Dare when others curse to bless.

Dare forsake what you deem wrong ;
Dare to walk in wisdom's way ;
Dare to give where gifts belong ;
Dare God's precepts to obey.

Do what conscience says is right ;
Do what reason says is best ;
Do with all your mind and might ;
Do your duty and be blest."

ANIMAL INSTINCT.

IN spring, 1827, I had occasion to witness a fact which interested me not a little. One of those beings who go about early in the morning with firearms, seeking what they may deprive of life, happened to mark two rooks on one of my trees feeding their young. The fatal tube was immediately levelled, and in an instant both birds lay gasping in the agonies of death at my feet. An idiot laugh, and a hurried retreat upon observing that I was a spectator of his morning's achievement, were all that I could make of him ; but I observed the poor orphan progeny, all unconscious of the calamity which had so suddenly reached them, still stretching out their bare, featherless necks, and raw, open mouths, in expectation of the wonted supplies. My heart sunk within me at the sight, and I could not help moralising on that cruel unthinking disposition which marks so many of our race. For twelve long hours, whenever a returning rook intimated that food was in the act of being supplied to surrounding gullets, did these poor, hungry, and seemingly perishing nestlings solicit supply. At last I observed a bird, more considerate than the rest, in the act of

surveying the perishing family. With much difficulty a small dole was brought up from the throat reservoir, which was devoured with screams of delight; another and another succeeded in this work of charity, till, I verily believe, the best fed progeny in my little rookery were these pauper dependants on common charity. "Here, then," said I—"here, at least, there is no use for poor laws; since Nature has established a principle even in the breasts of rooks which leads them to feed the hungry and support the orphan."

A few weeks ago a family named Shuker lived at Dawley, in the county of Salop, but had occasion to leave and go to Nottingham. They of course removed all their household goods, including a fine cat, which had been in the family for years. Arriving at Nottingham the cat showed signs of great dissatisfaction with her new abode, and after a few days disappeared. The other day the cat walked into the old house at Dawley, to the great surprise of the neighbours. As might be expected she was very footsore and lame. When it is considered that the distance travelled on foot by the cat, from Nottingham to Dawley, is over seventy miles, the feat seems one of the most wonderful on record. Hundreds have flocked to see the four-footed pedestrian. Large sums have been refused by the owner for the favourite cat.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

JUNE.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
2 The Holy Spirit promised	John xvi. 1—15 ...	xiv. 16.
9 The Interceding Saviour.	John xvii. 9—26...	ver. 15.
16 The Dying Saviour	John xix. 25—42...	Isa. liii. 5.
23 The Risen Saviour	John xx. 19—31 ...	Rom. iv 25.
30 The Ministry of Jesus	Heb. ii.	ver. 9.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
2 The Handwriting on the Wall,	Dan. v. 1-6, 13-31	ver. 27.
9 Daniel in the Lions' Den.	Dan. vi. 1—23.....	ver. 22.
16 Daniel's Prayer	Dan. ix. 3—19.....	ver. 9.
23 The Decree of Cyrus	Ezra i.	Isa. xl. 2.
30 Review of the Quarter's Lessons.		

JULY.

MORNING SUBJECTS.			Golden Texts for Repetition.
	SUBJECT.	FOR READING.	
THIRD QUARTER.			
7	Joshua encouraged	Joshua i. 1—11 ...	ver. 9.
14	Crossing the Jordan	Joshua iii. 1-6, 14-17	Isaiah xliii. 2.
21	Memorial Stones.....	Joshua iv. 1-9, 19-24	Ps. lxxvii. 11.
28	Preparation for Conquest..	Joshua v. 10 to vi. 5	Ps. xxxvii. 9.

AFTERNOON SUBJECTS.			Golden Texts for Repetition.
	SUBJECT.	FOR READING.	
THIRD QUARTER.			
7	Birth of Christ the Lord...	Luke ii. 8—20.....	ver. 11.
14	The Childhood of Jesus...	Luke ii. 40—52.....	ver. 52.
23	Ministry of John the Baptist	Luke iii. 1—22.....	ver. 8.
28	Jesus at Nazareth.....	Luke iv. 16—32....	ver. 32.

BIBLE QUESTIONS.

1. A MAN who, at the death of Moses, assumed command over Israel.
2. The mountain on whose summit Christ beheld Jerusalem three days before His death.
3. The mountain on which Aaron died.
4. The impious founder of the tower that was to reach to Heaven.
5. The orator who informed against Paul.
6. He who was hanged on the gallows he had prepared for a man who would not pay him homage.
7. The man to whom the first high priest of Israel resigned his priestly power.
8. A man with whom the ass conversed.
9. A man who reproved Abraham for not trusting in God.
10. The apostle who, with John, was tried before the Sanhedrim.
11. A disciple whose mother was a Jewess, whose father a Greek.
12. The name given to a patriarch after he had wrestled with an angel.
13. The mount around whose base all Israel prostrated herself in fearful expectation.
14. The man whose youngest son was Abraham.

The initials of the answers form the name of the man who was filled with the Holy Ghost.

PEPPER STREET SCHOOL, CHESTER.—Dear Mr. Editor,—It will no doubt be of interest to many teachers and scholars to know that in the recent Scholars' Competitive Examination in connection with the Chester branch of the London Sunday School Union, our school occupied a very prominent position in the list of prize awards. Scholars from Presbyterian, Calvinistic Methodist, Congregational, Primitive Methodist, and Methodist New Connexion Sunday Schools competed, and out of a large number of competitors our school secured two prizes out of six, and three certificates. The following is the list:—In the senior division, John Edwards obtained a certificate; in the middle division, Sarah Lee took first prize, Tom B. Burgess second prize, and Jessie Turner a certificate; in the junior division, Frank Turner took a certificate. I may say that the subject for examination was the reigns of Asa and Jehosaphat, as recorded in the Second Book of Chronicles.—G. COATES.

Mémoir.

—O—

ALICE SNOWDEN,

BATLEY.

ALICE SNOWDEN, daughter of Joseph and Ann Snowden, was born at Batley, June 18th, 1864. She became a scholar in our Zion Sunday School when five years of age, and continued to attend it till March 31st last, which was the last Sabbath she spent on earth. On Monday, April 1st, she complained of feeling unwell, but nothing serious was anticipated. Being her class-night she felt it a trial that she was not able to attend. She got no better; on the contrary, it became evident on the Thursday she was much worse; medical aid was procured, and the doctor pronounced her affliction to be inflammation of the lungs. The next day symptoms seemed to be more favourable, and hopes were entertained of her recovery. Those hopes, alas! were not to be realised. There came a relapse, from which she never rallied, and on Saturday morning, April 6th, 1878, she passed away, rejoicing in her Saviour.

She was a thoughtful, kind, honest-hearted girl, fond of reading good books, the Bible having a large share of her leisure time. She was beloved by all who knew her. During our late revival mission she found her way into the inquiry-room, and, better still, she found her Saviour. For months previous, however, she had been under strong religious impressions, and desired to serve the Lord. She joined the writer's class, and was never absent up to the time of her illness.

During the week she was confined to the sick room she often spoke of her class and those in connection with it. One day she said to the family, "Will you all pray for me?" and when her dear mother, just before the death, said to her, "Alice, my dear, you are very poorly;" she answered, "I'm all right; I'm all right." And so she passed away from suffering to glory, from friends on earth to friends in heaven, and, above all, to be with her dear Saviour.

J. J. F.

Batley, April 13th, 1878.

Poetry.

A LITTLE CHILD'S MORNING HYMN.

DAY again is dawning,
Darkness flies away ;
Now from sleep awakening,
Let me rise and pray.
Jesus ! tender Shepherd,
Watching while I slept,
Bless the little lambkin
Thou hast safely kept.

Help me, Lord, to praise Thee,
For my cosy bed ;
For my clothes and playthings,
For my daily bread ;
For my darling mother,
For my father dear ;
For the friends who love me,
Far away and near.

Robin blithe is chirping,
Glad the night is o'er ;
Larks the light are greeting,
Singing as they soar ;
I'm Thy little birdie ;
May I ever sing
Goodness-making music,
Unto Christ my King.

Daisies now are turning
Bright eyes to the sun,
And the light is shining
On them every one.
I'm Thy tiny flower ;
Jesus ! shine on me—
Turning all my lifetime
Grateful eyes to Thee.

God the Father loves me ;
Jesus died for me ;
And the Holy Spirit
Guides and comforts me.
Glory to the Father !
Glory to the Son !
Glory to the Spirit !
Blessed Three in One.





GATHERING FLOWERS.

GATHERING FLOWERS.



HE above engraving reminds me of a very pleasant trip made just lately to a charming spot in Yorkshire, well known to many of our readers. The trip was made in company with a kind friend and his wife, and their three children. The name of the eldest of these is Annie, only twelve years old, but tall and graceful for her years. Frankie comes next, a sharp intelligent boy of five. Nellie, the youngest, is about three. Twelve months ago she was very ill, but is now quite better and full of health and fun. Well, on a very recent Saturday afternoon we all went to Ilkley by train. The last time I was there, I went part of the way by coach, so that it was not yesterday. But now the railway winds along the charming valley of the Wharfe, past the quiet little town of Otley, and quite into the heart of Ilkley. What a rich and beautiful district it is !

When we got to our destination we all started straight for the river and the fields. Nellie, indeed, wanted a ride on one of the Ilkley donkeys, poor beasts ! but they all happened to be engaged, and she was prevailed upon to proceed in our walk. We had hardly got upon the soft, green grass, bespangled with flowers like gems, when Nellie became clamorous for some of the pretty flowers, and we had at once to collect her some daisies and buttercups for a nosegay. She was quite delighted, and so were we to pluck them for her. And who, whether old or young, does not love flowers ? And what in this world is more beautiful than flowers ? They are now to be seen in all their glory all over this garden England of ours. I often think how thankful we ought to be to God for making this world so rich and glorious in all respects. But flowers are Nature's jewellery ; and if our young friends have no gardens of their own, God's great garden is every year open to them ; and from it they may gather, like the little folks in the picture, the pretty flowers which grow in it so plentifully.

H. L.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 114.

FROM CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,
June 19th, 187—.

MY DEAR BEN,—

Thanks for your letter to hand a fortnight ago. How time does fly! Why, it doesn't seem very long since Christmas, and I find it only wants a few days until your midsummer holidays. Well, we shall be most happy to see you, though I for one shall not have much leisure to spend in your company.

I have seen young Instone two or three times at your father's. He is a nice little fellow, and I was very sorry to see him such an invalid. Bob carries him about with him almost everywhere.

I think I told you in my last what a nice fellow young Mr. Carson was. It has seemed twice as pleasant since he took the management of our office, though in consequence of alterations in the system we have even more to do than before. But instead of being distant and stern with us, he has a pleasant word for everybody, and takes an interest in our circumstances.

Since he has been here he has got the firm to set apart one room of the factory for a dining and reading room. So those of us who stay dinner, both clerks and factory hands, have our meals there now. There is a supply of papers and magazines for us to read, and also games of chess and draughts for those who like them. All who use the room are expected to pay a penny a week to the newspaper fund.

Mr. Carson has also established a Band of Hope in connection with the factory. It meets every Wednesday evening, and we have readings, recitations, and addresses. Of course I joined it the first week. They have made me secretary, and as young Mr. Carson is president, I have a great deal of business to arrange with him, and the more I know him the better I like him. My father was so glad for me to be connected with the Band of Hope that he at once undertook to make up the post-bag on Wednesdays himself. So I don't go home to my tea on that night. The first week or two I saved part of my dinner to keep the grub from biting at tea-time, but Mr. Carson found it out, and the last two weeks he has had tea brought into the office for himself and me. So you see I am getting on very well and feeling very comfortable.

Father and mother send their best wishes to you, and you will please remember me to your friend Instone. I am, my dear Ted,
yours very truly,

CHARLES THORNTON.

Letter No. 115.

From DR. BARLOW to BEN BARLOW.

The Laurels, Woodbourne,
June 21st, 187—.

DEAR BEN,—

So you break up on Friday? I hope we shall hear a good report of you for this "half."

I write at your mother's request to tell you to invite your friend Ted to come with you for a day or two. Mr. and Mrs. Instone have arranged to run up on Saturday to see Ernie, and they will stay until Monday. So Ted can come and see little Ernie and go home with his father and mother.

I won't say anything about Ernie's health. You will soon see him for yourself.

With love from us all, I am your affectionate father,

OLIVER BARLOW.

Letter No. 116.

From TED INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park,
London, June 26th, 187—.

MY DEAR BEN,—

I have just time to report the safe arrival here of Pa, Ma, and myself, after our delightful visit to Woodbourne.

Pa says he never enjoyed a short trip better in his life, and Ma looks brighter and more cheerful than I have ever seen her. The delightful surprise of seeing dear little Ernie able to walk a little way without assistance, his evident improved health, and her own delight in visiting your lovely village, have combined to make her wonderfully light-hearted and happy.

For myself, I can only say that Ernie is already far better than I ever thought he could be, and the three days I spent with you seem to have passed like a very joyous dream. All our talk on the way home was of Ernie's greatly improved health, and of the gratitude we should always owe your father and mother for their care and kindness.

It is frightfully hot here already. I don't know how I shall stand it next month. You see we have as much heat here as you have in the country, and the crowded buildings prevent us getting the benefit of the breezes which with you are so beautifully cooling.

However, I must bear it as well as I can, and get into the water as often as possible for a delicious swim.

Pa and Ma send their most affectionate regards. Pa will write to Ernie to-morrow. Give my love to him and to all my friends, and believe me, yours very truly,

TED INSTONE.

Letter No. 117.

FROM BEN BARLOW to TED INSTONE.

The Laurels, Woodbourne,
July 3rd, 187—.

DEAR OLD FELLOW,—

I hope you won't feel hurt at my delay in answering your letter. I have had very little leisure until now, but I would have *made* time for it ere this, only that I knew either Father or Ernie wrote every other day.

I took your brother out in the trap nearly every day last week. It doesn't seem to hurt him at all to ride now. The afternoons I spent with my old schoolfellows.

But I must tell you all about yesterday. It was the Methodist School Treat, and Tom Blunt got me a ticket. We rode in breaks from here to Brigham, a little market town about six miles beyond Hammerthorpe. There we formed into lines, and walked in procession to Brigham Hall, the seat of Squire Pieroy, who had given permission to hold the picnic in his grounds. The drum and fife band rode in the first van, and played as we went along.

Brigham Hall is a fine old mansion, and its grounds are famous all round here for their beauty and extent. There is a very large flower garden, with the flowers arranged in patterns like a beautiful big carpet, and here and there are fountains playing. Then there is a great big greenhouse, almost as large as the schoolroom at Dr. Tasker's, two vineries, a fernery, and a large peach-house. On one side of the greenhouse is the kitchen garden, and on the other side an extensive orchard that looks like a little wood, and all the trees were loaded with fruit that was just beginning to look tempting.

Of course we were marched through all these places under charge of the gardeners. I am afraid the flowers, the grapes, and the apples of would have proved too strong a temptation if we could have roamed among them as long as we liked. I will only speak for myself, but I must confess the delicate peaches and the purple grapes made my mouth water.

At the back of the house there is a piece of waste land about twice as big as our playground, with a few trees on it, but not enough to spoil a game of cricket. So a few of us soon had the wickets in, and began a jolly game. Our side won.

A little further from the Hall there is a game-proof fence, and beyond that are the Squire's game preserves. We were allowed to wander where we liked in the wood on the understanding that nobody threw at or tried to catch any of the game. It is a glorious place for a ramble. Some of the trees must be very old, they are so high and thick. One yew tree we saw covered ground enough to seat all the school-children under its thick branches. You remember how high the bracken is in Upleigh Wood; well, at Brixham it was even higher, and as nobody but the rabbits and pheasants run off the paths, it looked like a dense forest of fern.

I don't know when I enjoyed myself more. We had all sorts of games, plenty of cake and milk, and after giving three cheers for Squire Piercy, a jolly ride back to Woodbourne.

But I find I am almost at the end of my paper, so I must finish off. I hope you are not moping. I should not mope if I could roam about London at my leisure as you can. I don't think one holiday—or two or three—would tire me of sightseeing.

Ernie and everybody here join me in love to you, and to your Pa and Ma. I remain, yours as ever,
BEN BARLOW.

Letter No. 118.

FROM TED INSTONE TO BEN BARLOW.

3, Brighton Villas, Regent's Park,

London, July 8th, 187—.

MY DEAR BEN,—

Your letter has made me more than ever long to live in the country. You seem to be always having a trip or a fête, or sport of some kind on foot. And if you haven't any of these, you have the woods and fields, and those are varied enough for anything.

How I should have loved that trip to Squire Piercy's place! I could have dispensed with the flower gardens and fountains and hot-houses. We can see any number of those here almost any time. But there is nothing seems to give me such delight as a ramble through a wood. We have many trees here in the parks, and acres on acres of green turf, but everything is so prim and precise that there seems as much of art as of nature in it all. What I like is to squeeze through the interlacing boughs of thick brushwood, and leap into what looks like little lakes of ferns, with the satisfaction of knowing you are the first to enter it, for that season at any rate. If my health were good, and I were wealthy, I think I should like to travel into strange lands. It must be grand to wander through great forests where man has never been before, and see all the wonders of river and mountain scenery.

It seems just a bit queer that while I am always envying you your country pleasures, you should in turn wish for the opportunities I have. I suppose it is only human nature to think other people's lot in life better than our own. But perhaps, if we knew all, no one would be willing to change. What do you think of that reflection? Isn't it worthy of a philosopher?

You must not think from the first paragraph of this letter that I have been melted into melancholy by the great heat of the last few days. I have really enjoyed myself very much. I have had a stroll in the Park most mornings. I have paid one visit to the Zoo. That is my greatest treat in the summer holidays. I shall go at least once more before I return to school. I have had three swims—two in the public baths, and one in the floating bath on the river.

But the greatest treat I have had yet was a trip up the river by

moonlight on Thursday. John went with me. We started from London Bridge, so as to see how the Embankment looked at night. There were four of the river steamers set apart for the trip, and one of them had a really good brass band on board. We went up as far as Kew, and then turned back. John and I got off at the Waterloo Pier, and got home just before midnight. It was a glorious trip. You cannot imagine how beautiful the buildings on the riverside looked in the bright moonlight. I have been up the river many times by daylight, but it was so very different at night that I might have thought myself on some other river, only for recognising the Houses of Parliament, the bridges, and one or two other unmistakable landmarks.

We are all going to the Crystal Palace next week or week after, just which will suit Pa the best.

Give all our loves to little Ernie. We are so glad to hear of his continued improvement. Remember me kindly to all your friends, and believe me, yours very truly,

TED INSTONE.

Letter No. 119.

From BEN BARLOW to TED INSTONE.

The Laurels, Woodbourne,
July 14th, 187—.

DEAR TED,—

What do you think? I've turned teetotaller! You will remember Charlie Thornton saying in one of his letters that he had been made secretary of a Band of Hope that met at a room in the factory. Well, last Wednesday he invited me to the meeting. I enjoyed myself very much, but I was a bit taken aback when Charlie got up and delivered a bit of a speech—a good little speech it was too.

When the meeting was over Charlie introduced me to Mr. Carson, the president. He asked me why I didn't take the pledge. I said I never took any intoxicating drinks, but I thought it looked as if a lad couldn't be trusted if he was obliged to take a pledge. He said he knew three cases of young men in London who thought just the same, but somehow they had trusted themselves too far, for they had got into drinking habits, and were completely ruined as a consequence. And then, he said, even if I was sure I should be always able to withstand temptation, I ought to sign the pledge as an encouragement to others, who it was evident, without that safeguard, couldn't keep themselves from it.

I never saw it put in that light before, and it seemed so very reasonable that I at once signed my name in the pledge-book. My father seemed pleased at what I had done. Though he is not a total abstainer, he very rarely takes any intoxicant, and I have heard him say he never prescribes them for his patients.

Charlie wants me to get you to join in starting a Band of Hope at school. What do you think about it?

With kind regards from us all, yours truly, BEN BARLOW.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

XVIII.—ARTS AND SCIENCES—THE MICROSCOPE.



HE instrument known as the microscope derives its name from the Greek words, *μικρός*, *small*, and *σκοπεῖν*, *to view*; that is, to see or view such minute objects as without its aid would be invisible.

THE HISTORY OF THE MICROSCOPE.

The honour of the invention is claimed by the Italians and the Dutch; the name of the inventor, however, is lost. Probably the discovery did not at first appear sufficiently important to engage the attention of those men who, by their reputation in science, were able to establish an opinion of its merit, and to hand down the name of its inventor to succeeding ages.

If we consider the microscope as an instrument consisting of one lens only, it is not at all improbable that it was known at a very early period, nay, even in a degree to the Greeks and Romans; at any rate, it is tolerably certain that spectacles were used as early as the thirteenth century. Now as the glasses of these were made of different convexities and consequently of different magnifying powers, it is natural to suppose that smaller and more convex lenses were made, and applied to the examination of minute objects.

From a passage in Aristophanes it is plain that globules of glass were sold at the shops of the grocers of Athens in the time of that comic author. He speaks of them as "burning spheres."

Dutens has seen in the museum of Portici ancient lenses which had a focal length of only nine millimetres. He actually possessed one of these lenses, but of a longer focus, which was extracted from the ruins of Herculaneum.

At the meeting of the British Association, held at Belfast, in the year 1852, Sir David Brewster showed a plate of rock crystal worked into the form of a lens, which was recently found among the ruins of Nineveh. Sir David Brewster, so competent a judge in a question of this kind maintained that this lens had been destined for optical purposes, and that it was never an article of dress.

It is not difficult to fix the period when the microscope first began to be generally known, and to be used for the purpose of examining minute objects; for though we are ignorant of the name of the first

inventor, we are acquainted with the names of those who introduced it to public view. Zacharias Jansens and his son are said to have made microscopes before the year 1590; about that time the ingenious Cornelius Drebell brought one made by them with him to England, and showed it to William Borrell and others. It is possible this instrument of Drebell's was not strictly what is now called a microscope, but was rather a kind of microscopic telescope. It was formed of a copper tube six feet long and one inch in diameter, supported by three brass pillars in the shape of dolphins; these were fixed to a base of ebony, on which the objects to be viewed by the microscope were placed.

Fontana, in a work which he published in 1646, says that he had made microscopes in the year 1618; this may be perfectly true without derogating from the merit of the Jansens; for we have many instances in our own times of more than one person having made the same invention nearly simultaneously, without any communication from one to the other. In 1685 Stelluti published a description of the parts of a bee which he had examined with a microscope.

The history of the microscope, like that of nations and arts, has had its brilliant periods, in which it shone with uncommon splendour, and was cultivated with extraordinary ardour; and these have been succeeded by intervals marked with no discovery, and in which the science seemed to fade away, or at least to lie dormant, till some favourable circumstance—the discovery of a new object, or some new improvement in the instruments of observation—awakened the attention of the curious, and reanimated their researches. Thus, soon after the invention of the microscope the field it presented to observation was cultivated by men of the first rank in science, who enriched almost every branch of natural history by the discoveries they made by means of this instrument.

The single, or simple microscope.—We shall first speak of the single microscope, as that was invented and used long before the double or compound microscope. Its construction is so simple, that it is susceptible of but little improvement, and has therefore undergone few alterations; and these have been chiefly confined to the mode of mounting it, or to additions to its apparatus. The greatest improvement this instrument has received was made by Dr. Nathaniel Lieberkuhn, of Berlin, about the year 1740: it consists in placing the small lens in the centre of a highly-polished hollow speculum or mirror of silver, by which means a strong light is reflected upon the upper surface of an object, which is thus examined with great ease and pleasure. Before this contrivance it was almost impossible to examine small objects, not transparent, with any degree of exactness; for the dark side of the object being next the eye, and also overshadowed by the nearness of the instrument, its appearance was necessarily obscure and indistinct.

We must not omit in this place some account of Leenwenhoek's microscopes, which were rendered famous throughout all Europe, on

account of the numerous discoveries he had made with them. At his death he bequeathed a part of them to the Royal Society.

The microscopes he used were all single, and fitted up in a convenient and simple manner; each consisted of a very small double-convex lens, let into a socket between two plates riveted together, and pierced with a small hole; the object to be magnified was placed on a silver point or needle, which, by means of screws adapted for that purpose, might be turned about, raised or depressed at pleasure, and thus be brought near to, or be removed farther from the glass, as the eye of the observer, the nature of the object, and the convenient examination of its parts required.

The *compound* microscope that we shall notice is that of Dr. Hooke, who gives us an account of it in the preface to a work which he published in the year 1667. It was about three inches in diameter, seven inches long, and furnished with four draw-out tubes, by which it might be lengthened as occasion required; it had three glasses—a small object glass, a middle glass, and a deep eye glass.

On the 6th of February, 1672, he communicated to the Royal Society his “design of a microscope by reflection.” It consisted of a hollow spherical mirror of metal, and an eye glass which magnified the reflected image of any object placed between them in the united focus of the mirror.

In 1738, Lieberkuhn’s invention of the solar microscope was communicated to the public. The vast magnifying power obtained by this instrument, the colossal grandeur with which it exhibited the minute things of nature, the pleasure which arose from being able to display the same object to a number of observers at the same time, by affording a new source of rational amusement, increased the number of microscopic observers.

Like other inventions, the microscope has been brought nearer and nearer to perfection. In 1864 an eminent microscopist expressed his conviction that in the production of object-glasses with one-twenty-fifth of an inch focus, the microscope had reached its utmost attainable limit of perfection. He added that “it appears impossible to separate or define lines more numerous than 90,000 in an inch, on account either of the decomposition of light, or some other cause. It therefore seems beyond our power ever to discover more of the ultimate composition of bodies by means of the microscope.” Yet, an object-glass, with a one-fiftieth of an inch focus, has since been made by Powell and Lealand. This object-glass possesses *double* the power of the above, and defines with wonderful distinctness particles which the latter cannot render visible at all. It magnifies 3000 diameters with the low eye-piece, or, with what is called a No. 5 eye-piece, 15,000 diameters; that is to say, putting the thing more familiarly, 1,575,000,000 of times. It must immensely increase our knowledge of the lower organisms, and may even aid our researches into the ultimate constitution of matter. Having thus briefly traced the microscope to its present state of perfection, it may be interesting

to my young readers to read of some of the wonderful things which it has now accomplished. We will therefore conclude the paper by giving

SOME RECENT MICROSCOPIC RESULTS.

By a microscopic examination of the retina and optic nerve of the brain, Mr. Bauer has found them to consist of globules of $\frac{1}{2000}$ th to $\frac{1}{2000}$ th of an inch diameter, united by a transparent fluid. The achromatic microscope shows the hair to be indented with teeth resembling those of a coarse round rasp, but extremely irregular and rugged. And these incline all in one direction, from the origin of the hair towards its extremity; so that if a hair be drawn between the finger and thumb from the end to the root, it will be distinctly felt to give a greater resistance and a different sensation to that which is experienced when drawn the opposite way. By the aid of the microscope, shells can be measured to the thousandth part of an inch. Crystals can be obtained from an imponderable quantity of a substance, and those so characteristic that poisons can be thus detected when the substance for examination is too small to be submitted to test.

Sir David Brewster has detected, with a microscope, a fine down of quartz, the filaments of which could not exceed the *one-third of a millionth part of an inch*.

Professor Kelland has shown in Paris, on a spot no larger than the head of a small pin, by means of powerful microscopes, a specimen of distinct and beautiful writing, containing the whole of the Lord's Prayer written within this small compass. The microscope detects the invisible ingredients which adulterate our food, our drink, and our medicines. It tells the murderer that the blood which stains him is that of his brother, and not of the other life which he pretends to have taken; and, as a witness against the criminal, it on one occasion appealed to the very sand on which he trod at midnight. Hundreds of adulterations have been discovered, the detection of which was beyond the power of chemistry. Three distinguished chemists are known to have asserted it was impossible to detect the presence of chicory in coffee; whereas, by the use of the microscope, the differences of structure in the two substances can be promptly discerned, no matter to what extent they may be pulverised, mixed, or even roasted. Professor Sorby's microscope detects the most minute stains; even of the millionth part of a grain we can have the most perfect view. And by the microscope it has been found that in certain Bohemian slate-rocks there are fifty-one millions of animalcules to the cubic inch, each skeleton weighing no more than the two-hundred-millionth part of a grain.



PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

VII.—SPEECH AND SILENCE.

"A good word is worth much and costs little." "Better slip with the foot than the tongue." "The tongue is a little member and boasteth great things."



YES, *good words are worth much and they cost but little.* Why, then, are not more spoken? Words are plentiful; we meet with them everywhere. They fly into our eyes, buzz into our ears, slide into our hearts. They drop from the ends of our tongues and tips of our fingers. They flow from our printing presses far more abundantly than the frogs which were sent to plague Egypt sprang from the river side. Words, words, words! Let us be thankful that among these countless swarms of words there are so many "*good words*." These good words are being sought out, set in order, cheerfully spoken in the class, and home, and sanctuary. People who are not eloquent, not rich, not talented, nor in any way remarkable, are carrying these good words wherever they go. "They drop as the rain and distil as the dew, as the small rain upon the tender herb, and as the showers upon the grass." The wise man truly says—"A good word maketh the heart glad."

"Next to good words no words are best." Sometimes it is the very height of wisdom to be silent: "Whoso keepeth his mouth and his tongue keepeth his soul from troubles." Often indeed have we seen that while speech was silvern, silence was golden. But it is not *always* so. There are times when silence is mean and cowardly. To sit quietly by, and hear a fair reputation slandered, a noble cause betrayed, a base scheme devised, a mischievous plot hatched—this is not golden, it is unmanly and wicked. There is a weak silence, born of apathy and dulness; there is the cowardly silence of the man who dares not speak; there is the ignorant silence of the man who has nothing to say; there is the selfish silence of the man who refuses to denounce a crime, lest by so doing he should lose money, fame, or position; there is the guilty silence of the man who sits at the table among the guests, but without the wedding garment, and when questioned by the King he is "speechless;" there is the sulky silence of the boy or girl who cannot have their own way, and therefore remain in their "dumps" for hours, and even days and weeks; there is the unmanly silence of those who sit in Cabinets as mere "dummies," while one restless schemer drags their country to the verge of an awful abyss. We thus see that it is not always true that silence is golden. It is often of less value than tin; yea, it is more worthless than dross. Still, it is probably quite safe to say that men

sin oftener by their speech than by their silence. Most of us talk too much, unless we talked with more sense and to better purpose. "They that talk much err much." "In the multitude of words there wanteth not sin." Great, swelling words are often closely connected with small and paltry deeds. The glib tongue, the vain heart, and the empty brain often go together. It is in the empty can that the stones makes the biggest noise. "A fool's tongue is long enough to cut his own throat." It is no unusual thing to see a fool utterly thwarted and foiled by his own words. "Out of thy own mouth will I judge thee." "The tongue cuts where the teeth cannot bite." The Bible often speaks of the tongue as a "sword," a "drawn sword," a "sharp sword," the "piercing of a sword." The tongue cuts, cuts deep into tender and honest hearts; cuts asunder the bonds of long and sacred friendships; cuts away the blossoms from a noble reputation. Because the tongue is a sword let us sheathe it. How often, when we are tempted to use this dangerous weapon recklessly and foolishly, to utter words of anger, scorn, and insult, does the gentle and holy Saviour come to us, and say as He did to Peter, "Put up thy sword into the sheath." It will do us good to remember that the day is rapidly coming when we shall have to give an account of every idle word we speak; and still more good if we earnestly breathe this wise old prayer—"Set a watch, O Lord, before my mouth, keep the door of my lips!" It is a great misery to be a fool and a dunce, but it is a still greater misery for a man to go about the world proclaiming his own folly and weakness.

Good John Bunyan tells us that his pilgrims, Christian and Faithful, were joined by a very clever fellow, whose name was Talkative. He gave promise of being a brave companion and a very excellent pilgrim. This man was the son of Mr. Saywell; he dwelt in Prating Row. Although he had a fine tongue he was but a sorry fellow. Religion had no place in his heart, or home, or life; it all lay in his tongue. He could talk on the ale-bench as fluently as on the path of the pilgrims, he could talk of things heavenly or earthly, things moral or evangelical, things sacred or profane, things past or to come, things foreign or at home, things more essential or things circumstantial. Yet in spite of all his talk he was but a "sounding brass and a tinkling cymbal."

When we do speak let our words be charged with sound sense, healthy feeling, and strong conviction. There is much force in these words, written by Hazlitt, "I hate anything that occupies more space than it is worth. I hate to see a load of band-boxes go along the street, and I hate to see a parcel of big words without anything in them." Probably the band-boxes *will* have something put in them—bonnets and hats, almost infinitely varying in shape and size; but what will be put in many of the bonnets and hats? How much brain, and clear thought, and sound judgment? And what shall be put in the words that have yet to be spoken? Let us fill them with light, and purity, and spiritual power.

"The ill that drops from a man's mouth falls into his own bosom ; so also does the good." If it be true, and *it is*, that we shall have to give account of our idle words, it is also true that we shall have to give account of our idle silence. If guilt clings to the bad words that *were* spoken, guilt clings also to the shame or fear that gave no voice to the solemn conviction, the generous impulse, and "the good tidings of great joy." Speak, but speak truly, tenderly, and bravely.

"Speak gently ! It is better far
To rule by love than fear ;
Speak gently, let not harsh words mar
The good we might do here.

"Speak gently to the little child ;
Be sure its love to gain ;
Teach it in accents soft and mild,
It may not long remain."

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXVIII.—OCEAN VEGETATION.

THE area of the sea is nearly three times as large as that of the land. We have seen how prolific life is on the land, both in its animal and vegetable kingdoms, and that even down to the very edge of the water, organic life flourishes with great abundance. For this life to come to an end where the empire of the sea begins, would be for the largest part of the world to be a dreary waste, and for an enormous blot to rest on the fair page of Nature. But in fact God has made the sea as fertile as the shore, and teeming life, both vegetable and animal, may be seen in every part of the grand old ocean. The bottom of the sea is as various as the surface of the earth, and on the marine plains, valleys, and hills, where every variety of physical configuration exists, plants and trees grow with great abundance, and offer for the contemplation of the naturalist, objects of as various and striking interest as the glorious growths of tropical climes and the soberer but not less remarkable productions of the temperate and arctic zones. In the Southern seas there are sea plants that grow to the height of 360 feet, and thus exceed the tallest trees of which we have any knowledge. On our own coasts there are sea-weeds of exquisite beauty ; some like tufts or tassels of velvet, or clusters of beads of curious workmanship, some with long broad leaves like the reeds that grow by the river side, only thicker and longer, like huge leathery streamers, and some like trees with slender stems indeed, but numerous branches that spread afar.

The organisation of sea-plants, however, is different from that of

those that grow on land. The differences are just such as we might expect from the functions these plants are designed to fulfil, and the salt fluid in which they thrive. The adaptation of means to ends is a striking proof of the wisdom and goodness of the Creator.

The roots, stem, and branches, for example, have a different relationship to each other to that maintained by an ordinary tree. The root of an ordinary tree is the main source of nourishment, and its stem serves to uphold the branches, and convey the sap upwards from the root. Injured in any one part the whole tree is affected, and possibly dwindles and dies. But the branches of an ocean tree are fed by the water in which it lives ; its stem is very slender, for the heavy branches are upheld by the dense fluid ; its root is small, for it has not either to gather or convey the food of the plant, but simply to fix it in the place where it lives ; and part of the tree might be lifted out of the water, and there shrivel and die, without any of the parts submerged being affected in the slightest degree thereby.

Just as elephants, lions, bears, and other animals find food and shelter in the forests they inhabit, so these ocean trees provide sustenance and defence to innumerable animated beings who make almost every part of the sea as thronged with life as the crowded streets of a city. And as on land there is mutual benefit given and received by both animal and vegetable life, so the same order is beheld in the water. All animals exhale carbon, and require a constant supply of oxygen ; all plants produce oxygen, and require carbon. Thus the existence of both is necessary for either ; each takes up and profits by what the other rejects. It is the same in the watery world. All the various tribes of marine animals require more or less of oxygen, which they obtain readily by means of respiration from the water in which they live. But the myriads of creatures that live in the sea would soon exhaust all the oxygen it contained, were there not abundant provision made for a fresh supply. They would die just as certainly as a number of persons confined in one room must die unless the air they breathe is renewed. This fresh supply of oxygen is provided by marine vegetation. The plants that grow so plentifully in the ocean charge it with that oxygen so necessary to the life of all the fishes that live there ; and on the other hand, the exhalations and decay of the fishes supply the plants all the carbon necessary to build up their beautiful structures.

Other uses are served by ocean vegetation. Torn up by the storms, or by the action of the tides, it is cast upon the shore often in great quantities. Iodine, which is so valuable a medicine, is obtained from burnt sea-weed. The "rack," as the broken and tangled plants are called, is also used as a manure. Spread over the land it decomposes fast, and gives to the earth rich and fertile elements. By the cottagers on the sea-shore it is also used as fuel ; and often, also, it serves, when well dried, as an excellent bed. In Guernsey, and the other Channel Islands, there is at certain seasons of the year what is called the "vraie" harvest, when great numbers of the inhabitants

leave for a few days their ordinary avocations, and their children are liberated from school, and altogether they go down to the seashore, and gather in great quantities the valuable sea-weed.

Many of us have perhaps often seen the broken sea-weed thrown up by the advancing tide on our own coasts, and we may have read of the more wondrous growth of other parts of the ocean, without ever thinking of the many important functions that marine vegetation has to fulfil. But this is only one illustration out of many that everything is designed for a purpose, and that God has not created even a blade of grass without a function and a use. So far as the wisest men can understand the world, it is a system of marvellous wisdom, and every class of objects, however unpromising in appearance, may be seen to have bound up in it issues of great consequence. As we see the many uses of sea plants, we realise that every object in Nature is capable of leading us into the presence of God; and that it was not without ample reason that the poet wrote of the never slumbering ocean—

“Impassioned orator with lips sublime,
Whose waves are arguments which prove a God.”

THE PRISONER'S CHILDREN.

By MRS. MELDRUM, Author of “Ned's Search.”

CHAPTER VIII.—ALONE ONCE MORE.



SUCCESS continued to attend the three little hawkers as long as the summer lasted, and taking all things into account, it was the happiest summer they remembered. Mrs. Kelly proved a true friend, under whose guidance Lu became a very creditable housekeeper, and Willie, with Bernard for instructor and companion, gathered in the sweets of learning with precocious avidity. Both children had joined the Band of Hope and the Sunday school, and the light of the Gospel message was already diffusing its radiance over their dingy home. Often might be heard their untrained voices rising in some simple hymn as they sat together in the evening, and while Lu mended, or added to their scanty wardrobe, Willie would read to her from the Bible or Pilgrim's Progress, both the gifts of Mr. Hill, who continued to keep up a friendly intercourse, or from one of the interesting publications to which their monthly subscriptions to the Band of Hope entitled them.

But as autumn closed, and the cold of winter began to thin the number of visitors to the park, custom declined, and day by day Lu's basket came home less and less lightened of its contents.

They had not been able to save much during their prosperity, as

the rent and food, and the improvement of their clothing, had pretty nearly kept pace with their earnings. It was becoming very evident that some new plan must be adopted, or their home, poor though it was, must be given up.

"Perhaps people would buy matches and chips as likely as anything now it's coming so cold," suggested Bernard, one night, after a long consultation had been held.

"Well, we might try, mightn't we?" answered Lucy. "I'll just step up and see what your mother thinks about it."

Mrs. Kelly approved, so a stock of matches and bundles of firewood was purchased with the remains of their capital, and the new trade was hopefully commenced.

Usually Willie, who was fast losing his timidity with regard to strangers, took his seat on some convenient curb, and kept charge of the main stock, while Lu went to and fro with one or two boxes, offering them to the passers-by with a somewhat sonorous cry of "Fuzees, Sir, best fuzees, only a ha'penny a box—fuzees!"

It was, however, a very scanty living, and frequently the children returned home cold, weary, and hungry, and went supperless to bed, not daring to break into the few pence which must buy the next day's stock-in-trade.

To add to their difficulties, Mrs. Kelly's whole time and attention were devoted to Bernard, who was dangerously ill, and as the disease was of an infectious nature, all communication between the two families was interrupted for several weeks, at the end of which time the Kellys removed back to their old home in the country, anxious to take their only child into purer air. It was with sad hearts that Lu and Willie watched the cart loaded with goods, and they waved a long-farewell as Mrs. Kelly and Bernard got into the light, covered waggon sent by an old neighbour for the removal of the invalid boy.

Bernard smiled brightly at them, and his mother called out, in a voice full of kindness—

"We'll send for you both as soon as Bernie's well, and you shall have some good fresh air. Take care of each other—good-bye."

It would have been a comfort to have grasped once more the motherly hand that had done so much for them, but this might not be, and Lu forced back her own tears to soothe her little brother, of whom she now felt she had indeed sole charge till her father's return, and as his term of imprisonment had almost expired, he might be with them any week or day now; and yet it was scarcely with hope that they looked forward to his coming. Recollections of times, not few nor far between, when, overcome by the demon of intemperance, he had showered upon them angry words and heavy blows, were ineffaceably mingled with the desire for a provider for their wants. In the light of the Band of Hope teaching, their father's besetment stood out clearly defined in all its deformity.

Many were their talks as to the possibility of saving *their* father, as they had heard of others being saved, but no definite plan had

been mooted. They had commenced of late to sell their matches chiefly in the busy thoroughfare close by the prison gates.

"Then we'll see him come out, and mind he goes right home with us, and then, p'raps, he won't get anything to drink."

"Yes, and he'll see we're not ashamed of him neither. Bill says he'll never come home again, 'cause we should be 'shamed of belongin' to him when he's been in prison."

"I'm not though," answered Lucy, when confronted with this new difficulty. "He's a lot nicer than Bill's father, anyhow, so he needn't talk."

"Well, but, Lu, father might feel like that, you know, so we must watch for him, mustn't we?"

"Oh, yes, that's right enough. You keep a sharp look-out all the time, and be sure you don't miss him."

"I shall. Oh, Lucy, look—look how splendid!"

The exclamation brought more looks than Lucy's upon the crippled child. A lady and little girl were passing at the time, and the latter carried a bouquet of rich hot-house flowers, which had drawn forth Willie's burst of admiration.

The lady was passing on, but her little daughter stopped, and, regarding Willie with a look full of tender pity, drew from her flowers one lovely white camellia bud, and placing it in his hand without a word ran on to join her mother.

"Oh, Lu, Lu, see what she given me, Lu!"

But Lucy had crossed the street, and was trying to suit a testy purchaser with a bundle of fuel. One bunch was declared to be too thick chopped, another short of pitch, and a third quite damp.

"It's been snowin' so, ma'am," she ventured to plead at the third complaint.

"You should keep 'em covered then. How are fires to be lighted with wet chips, I'd like to know? No, I shan't take them without you give me a bundle in, for them being so damp."

Lucy hesitated, but the thought of how few coppers she had yet taken made her give way. As she turned she found Willie close beside her; unable to restrain his impatience, he had crossed to her at the risk of being run over.

Lucy's first impulse was to scold, but the eager, joyous face prevented the words from coming, and instead, she praised his flower to his heart's content.

It was some time before they could make their way back through the crowd of vehicles, and when they did so, what was their dismay to find every vestige of their little stock had totally disappeared!

"Oh, Willie," exclaimed his sister, "it was too bad of you to leave them. You might have waited till I came."

This was too much for Willie's remaining fortitude; throwing himself down on the muddy pavement, he sobbed violently, much to Lucy's vexation. Picking up her little brother and setting him not very gently on his sled, she made her way through the already gather-

ing crowd, and did not pause till she reached home, when she seated herself in the cold chimney-corner and hid her face in her apron, regardless of everything but her loss. After many vain efforts to make her talk, Willie exerted himself as far as possible to make things comfortable; with some difficulty he scraped together sufficient wood and coal to lay a fire in the low grate, which he could just reach.

It was long since they had indulged in tea, and all the provisions in the house were a few potatoes. These Willie placed under the fireplace on an old shovel to bake; then, seeing that Lucy had fallen asleep, he kept quiet until his potatoes were ready for eating, when, pushing himself to his sister's side, he began gently to stroke her hands.

Refreshed by her sleep, Lucy woke up in more genial humour, and enjoyed the supper so unexpectedly prepared for her.

"You have been clever, Willie, boy," she said, lifting him on her knee, knowing he would doubly enjoy his supper there. "We'll have our supper at any rate, but I don't know whatever we shall do to-morrow."

"God will take care of us," said Willie, softly; "you ask Him Lucy."

"No, you, Willie." So together the children offered their simple prayer, though only Willie spoke the words—

"Please God take care of us to-morrow; we haven't anything to eat, nor to sell, and we don't know what to do. Please take care of Lucy and me, for Jesus sake."

CHAPTER IX.—A VISIT TO THE COUNTRY.

THE morrow brought them something good in the form of an invitation from Mrs. Kelly to come and spend a week with them.

Willie clapped his hands in glee at the thought as he made out the message which Bernard had printed in clear type, for the greater ease of his former pupil.

"How nice, isn't it, Lu? And to think of a whole week with Bernie, and what a beautiful letter! Don't you think the postman was surprised to have to bring us a letter?"

"Yes, I daresay he was; but see here, Willie, if we go to Burton, and father comes out, we may just miss him, and if we came here and found us gone, whatever would he do?"

Willie's face fell, "Oh, we mustn't go then, must we, Lu? We mustn't miss father."

Just then a figure paused at the top of their cellar-steps, and a voice called out—

"Be there a little lad down there called Will Tomlins?"

"Yes," answered Lucy, startled by the sudden inquiry. "What do you want with him?"

"I want him, that's all, except that I want you too. You're to get ready right off. I've my cart here goin' back to Burton, and some

friends of yours there wants to see you, so you may's well ride as walk it."

"We'll go, Willie, at any rate, and just see them; perhaps they'll know just when father 'll be coming out. Here's your hat; go along!" Then, without giving him time to "go along," Lucy lifted him up into the arms of the kind, rosy-faced carter, and followed them to the cart with Willie's sled and one or two odd articles she gathered up at a moment's thought. After locking the door, she was quickly lifted up to a seat in the straw, and wrapping her little brother closely round with her own shawl in addition to their one quilt, she prepared to enjoy the novelty to the full.

What wonderful enjoyment there was in that six-mile ride in a spring cart! What gleeful chatter as they passed well-known landmarks, Willie's old school, the park-gates, and the spot where they had sold the first ginger-cake! The prison did not lay in their route, or the sight of its grim walls, and the thought of their father would have sobered them, as it had often done before.

After the park was passed, came a gradual change from town to suburb, and in the end the open country was reached, and field after field stretched out before them. Snow had fallen thickly during the previous night, and now the faint winter sunshine lighted up the wide expanse of hill and dale, and made a glitter as of millions of crystals.

It was a scene of unwonted stillness and purity, and went to the hearts of the children with a soothing influence which both felt but neither could have expressed. But, notwithstanding the beauty of the ride, the intense cold made the little travellers glad when their charioteer pointed out a small cottage on the edge of a glen, now bare enough, but promising in summer to be a most lovely situation.

"That's Kelly's house," said he, "and there be they all standing to watch for you; see that lad of theirs is wavin' his handkerchief." A few more minutes brought them to the house, where a warm welcome awaited them.

"We musn't stay a week though," answered Willie, in response to Bernard's eager greeting.

"Yes, you must though, and longer too, won't they mother?"

"We'll see, Bernie; but let them get in first before you talk about going away again," and Mrs. Kelly lifted the little cripple into her motherly embrace, and led the way into the snug little kitchen.

Mr. Kelly had made inquiries before sending for the children, and was able to assure them that their father's sentence would not expire for some weeks, so, though disappointed in their hope of soon having him with them again, they were able to enjoy their visit without the fear of missing him.

It was too cold for much outdoor pleasure, but pleasure was not wanting within. Mrs. Kelly and Lucy had a busy happy week making up some warm clothes for the latter, while another suit of Bernard's was altered to fit his little friend. Then came a bright

spring day and another followed it, and Mrs. Kelly said it was a pity not to get the good of the fine weather, as they had had so much bad, so the week grew to a fortnight, and at the end of that little Willie sickened, and had to be nursed and tended night and day. Mr. Kelly was despatched to pay the back-rent for Lucy, and to give up the key, as there was no telling when the children would be able to return.

Their few goods were taken in by a poor neighbour, who was glad enough to have the use of them for her trouble.

And so the month passed over, and March opened mild and balmy. Violets nestled on the south banks, and primroses brightened the hedgerows. Lucy was the picture of health and activity; she had rambled over hill and vale with Bernard, and grown familiar with the songs of the birds and the music of the brooks; her overtaken body and careworn mind had had just what they required, thorough rest and recreation. And Willie was better, though he was still white and wan, and his large grey eyes seemed often to look beyond the things around him. His health was giving way, and his friends knew his life could not be a long one; yet he had so entwined himself around every heart that it was with great reluctance he was allowed to depart.

But the time of their father's release was at hand and the children could not be longer detained.

Early in the morning Lucy and Bernard were out in the dewy fields filling large baskets with the freshest of primroses and violets. These would be sure to sell, and keep them for a day or two, and Bernard promised to send a supply twice a week while they lasted. Then, with slower steps, the two returned to breakfast, and presently Lucy and Willie, with their flowers, were on their way to meet whatever might befall them. It was no wonder they were silent as the cart rattled over the country roads and each turn brought them nearer their lonely home. It was something, however, to have a home to go to, and Mr. Kelly, after trying to find a better room at the same rent, had re-taken for them their old apartment, which was still empty, and where they were duly deposited about nine o'clock.

But now the old life began again; but through it ran a golden thread that before had been wanting. Morning and night the children knelt together and felt that they had a Father in heaven, who heard their simple prayers and took them under His never-failing protection. Neatness, too, reigned where disorder used to brood. Lucy was bright and active, and though Willie suffered more than of old, yet his fretfulness had given way to cheerful endurance, and as he pushed himself along by Lucy's side or watched over a reserve flower-store, few would have thought how worn and wearied a body was hidden under his bright smile.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

JULY.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
7 Joshua encouraged	Joshua i. 1—11 ...	ver. 9.
14 Crossing the Jordan	Joshua iii. 1-6, 14-17	Isaiah xliii. 2.
21 Memorial Stones.....	Joshua iv. 1-9, 19-24	Pa. lxxvii. 11.
28 Preparation for Conquest..	Joshua v. 10 to vi. 5	Ps. xxxvii. 9.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
7 Birth of Christ the Lord...	Luke ii. 8—20.....	ver. 11.
14 The Childhood of Jesus...	Luke ii. 40—52.....	ver. 52.
21 Ministry of John the Baptist	Luke iii. 1—22.....	ver. 8.
28 Jesus at Nazareth.....	Luke iv. 16—32....	ver. 32.

AUGUST.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
4 Jericho taken	Joshua vi. 6—20	Heb. xi. 30.
11 Achan's Sin.....	Joshua vii. 6—26.....	Eccl. ix. 18.
18 Ebal and Gerizim	Deu. xxvii. 1-8; Jos. viii	Jer. xxi. 8.
25 Caleb's Inheritance.....	Josh. xiv. 6-15 [30-35]	Ps. xlvii. 4.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
4 The Draught of Fishes ...	Luke v. 1—11.....	ver. 5.
11 The Centurion's Faith....	Luke vii. 1—10.....	ver. 9.
18 The Widow of Nain	Luke vii. 11—23.....	Eph. ii. 1.
25 The Friend of Sinners....	Luke vii. 36—50.....	xv. 2.

BIBLE QUESTIONS.

1. A RICH herdsman of Mesopotamia.
2. A land celebrated for the purity and abundance of its gold.
3. A queen of Persia.
4. A chief city in Bashan.
5. A stone in the high priest's breastplate.
6. A city founded by Solomon in the desert of Syria.
7. An ancient instrument of music.
8. A skilful artificer of Tyre.
9. A man in whose house the ark of the Lord remained three months.
10. A river, on the banks of which Daniel had a famous vision.
11. The treasurer of Cyrus, king of Persia.
12. The valley in which David slew Goliath.

The initials of the answers from an important question which Christ asks.

JUVENILE MISSIONARY MEETINGS.

GLOUCESTER.

For several years past our young people in this city have done nothing towards helping the Mission Fund. Indeed, it has been for some time with the school "a struggle for existence." But this year an effort has been made to help the missions, nor is the result at all discouraging.

The following sums have been collected by the scholars:—

	£	s.	d.		£	s.	d.
Geo. East ...	0	5	4½	Miss Williams ...	0	1	0
Sarah Starr ...	0	5	0	Fannie Jeffries ...	0	1	0
Elizabeth Banfield ...	0	5	0	Ellen Gleet ..	0	0	9
Annie Watling ...	0	2	0	William Lewis ...	0	0	8
Henry Hind ...	0	1	6½	Wm. James Baldwin ...	0	0	8
Miss Tipping ...	0	1	6				
Kate Williamson ...	0	1	4				
Jemima Hewish ...	0	1	1				
					£1	6	11

The Juvenile Missionary Meeting was held in the chapel on Sunday, April 28. After the report had been read, addresses were given by Mr. Banfield and Rev. A. Smith. A number of the elder scholars gave recitations, and the proceedings were enlivened by the singing of a number of hymns, which had been specially selected for the occasion. We had a good congregation, and, though the service appeared to be a novel one to our people, it seemed to commend itself to them.

Collected by Cards, £1 6s. 11d. Public Collection, £1 16s. 9d. Total, £3 3s. 8d.

ELSWICK, NEWCASTLE-ON-TYNE.

We held our Annual Juvenile Missionary Meeting on Sunday evening, March 24, which was conducted by Mr. Wm. J. Nesbitt, of Wallsend. After the meeting was opened, Mr. Nesbitt gave an earnest address on

bringing souls into contact with God. The secretary gave a brief report, showing the amount of moneys realised by the collecting cards. We are sorry that it is not more; but owing to the depression of trade, causing so many hundreds of men to be out of work, we are thankful for what was got. The following is the sum in total:—By cards, £3 4s. 3d.; collection, 10s. 9d.; making £3 15s.

During the meeting, addresses were given by Robert Cotterall and Wm. Dover on mission subjects. Recitations were also given by Robert Pinder, Thomas Lane, Rose Carr, and Margaret A. Lane, all bearing on missions. A profitable evening was spent, and we hope that some good was done.

W. DOVER, Secretary.

ARDSLEY CHAPEL, BARNESLEY CIRCUIT.—Dear Sir,—On Sunday, May 12th, the first meeting of the Juvenile Missionary Society in connection with our Sabbath school was held in the chapel. The chapel being well filled, and a most interesting and profitable meeting, it was well calculated to encourage a missionary spirit amongst our scholars. At ten o'clock in the morning the chair was taken by our young friend Charles Kenyon, who, after delivering a short but interesting speech, called upon the secretary to read the report. Amount collected:—Laura Harper, £1; Esther Ann Wilson, 9s. 3d.; Geo. Ed. Thompson, 9s. 2d.; Matthew Lowe, 6s. 9d.; Mary Johnson, 6s.; John Liversidge, 4s. 7d.; Annie Brook, 3s. 6d.; Annie Hudson, 2s. 2d.; Emily Teal, 1s. 10d.; from a Free Will Offering in the Chapel, 7s.; total, £3 10s. 3d. We think this very creditable considering the many applications that have been made during the year for other things. God has owned and blessed our labours this year. After which able addresses were given by our young friends. Appropriate hymns were also sung by the scholars, conducted by Thomas Thompson, and accompanied on the organ by S. M. Thompson. Stimulated by these results we enter upon the duties of another year with renewed earnestness, and hope with the help of God to do more in the future than has been done in the past, and thus by our endeavours strive to push on the Gospel chariot, and hasten the time when Christ shall have the heathen for His inheritance and the uttermost parts of the earth for His possession. After a vote of thanks to the chairman, the meeting concluded with Brother Rogerson offering prayer, all departing, we trust, with fresh courage and determination to labour on in the cause of Missions.—JOHN HARPER, Secretary.

HURST.—We held our Annual Juvenile Missionary Meeting in the chapel on Sunday afternoon, April 28th, 1878. Our esteemed friend Mr. L. Charlesworth presided. The meeting was also addressed by the Rev. John Shaw, Mr. George Rhodes, and Mr. Luther James Knott, who gave very suitable and interesting accounts of our Foreign Missions. Appropriate hymns were sung by the juvenile choir, under the leadership of Mr. W. H. Coop. Also the following recitations and dialogues were given by a few of our Sunday-school scholars:—"The Widow's Mite," "An Appeal on behalf of the Heathen Child," "The Wise and Foolish Virgins," "An Address for a Juvenile Missionary Meeting (No. 2)," "England's Duty to the Heathen," "Who is my Neighbour?" Hurst Juvenile Missionary Effort for 1878:—By Boxes—1st Select Class, Females, £4 7s.; 2nd Select Class, Females, £4 1s.; 1st Select Class, Males, £1 16s. 10d.; 2nd Select Class, Males,

£3 14s. By Books and Cards—Joel Kershaw, £1 10s. 3d.; John Bird, £1 5s. 1d.; William Thornley, £1 1s.; Elizabeth Speight, 11s. 1d.; Mary E. Wallwork, 5s.; Frank Naiden, 4s. 8d.; Alfred Hitchen, 2s. 8d.; Ada Whitworth, 1s. 11d.; Sarah H. Woolley, 1s. 10d. By Public Collection, £9 18s. 8d. Total, less expenses (£2 8s. 1d.), £26 7s. 11d.—JOHN B. JACKSON, Secretary.

ANDOVER STREET, SHEFFIELD.—Dear Mr. Editor,—We held our Juvenile Missionary Meeting on Sunday, May 5th, 1878. Our esteemed friend, George Saville, Esq., presided, and there was a good attendance. The secretary read the report, which showed that notwithstanding the almost unparalleled depression of trade the mission funds had not been allowed to suffer. The meeting was addressed by the Rev. Jabez Marrat, late missionary from Demerara, who gave us a stirring and thrilling account of his labours in that place. Addresses were also delivered by the Rev. J. Coultas, Marcus Fenton, Esq., and Mr. A. Bourne. A selection of hymns was sung by the scholars, conducted by Mr. Geo. Feltrup, and accompanied on the harmonium by Mr. A. Saville. The financial result shows an advance on last year, and we hope in the current year by God's help to achieve still greater success.—ARTHUR THOMPSON, Secretary.

Annual Juvenile Missionary Report. May 5th, 1878.

	£	s.	d.		£	s.	d.
Young Women's Class		5	8	A. Bourne ...		3	0
1st Class Girls ...		7	7½	W. Oldfield ...		2	6
2nd „ ...		2	5½	Miss Chappell ...		2	6
3rd „ ...		2	7	Miss Granger ...		2	0
4th „ ...		3	5½	Mrs. Sherwin ...		2	0
5th „ ...		1	11½	F. Morton ...		2	0
6th „ ...		4	9½	W. Thompson ...		1	6
Infant Class ...		11	4½	A. Saddington ...		1	6
Young Men's Class ...		10		A. Saville ...		1	6
Select Class Boys. ...		2	7½	Collected by Scholars—			
1st „ ...		2	4	Arthur Chappell ...	16	10½	
2nd „ ...		2	5½	James Haslam ...		5	0
3rd „ ...		3	4½	John Coultas ...		4	6
4th „ ...		2	2½	Martha Ann Wood ...		3	8
5th „ ...		4	10	George Hirst ...		3	1
6th „ ...		2	4½	Miss Whitton ...		2	8
Donations—				Frank Newberry ...		2	0
A. Thompson ...		4	6	Mary Ann Clarke ...		1	4½
Mrs. Thompson ...		3	0	Elizabeth Argent ...		1	2
Mr. Thompson ...		3	0	Alice Bourne ...		1	1½
Miss E. E. Axe ...		3	0	Sums under One Shilling	2	1½	
Miss Feltrup ...		3	0	Collection ...	6	12	7
J. Mellor ...		3	0				
J. Bingham ...		3	0	Total ...	£14	10	3½
T. H. Fletcher ...		3	0				

ZION, NORTH STOCKTON.—Dear Sir,—On Sunday evening, May 5th, we held our Annual Juvenile Missionary Meeting in the chapel. The meeting was presided over by our minister, the Rev. H. Dolamore.

There was a large congregation, and the meeting, which was of a very interesting character, was well sustained for nearly two hours and a half. The meeting opened with reading of Isaiah ii. by Mr. John Bateman and devotional exercises by the chairman. An interesting report was then read by one of the superintendents of the school, Mr. George Atkin. The report showed that the gross amount collected for Missions (Foreign) this year was £15 19s. 2½d., against £9 19s. 1d. last year, an increase of £6 0s. 1½d. Towards this the juvenile collectors raised this year the sum of £9 2s. 10½d., against £4 8s. 7d. last year, being more than double the amount raised last year. The young friends this year have made a special effort, and have worked right nobly; over thirty took collecting cards, and several of the teachers lent their valuable help. Miss Susan Howie and Miss Susan Avery collected each the sum of 17s. 6d.; Thornton Lodge, 14s.; John Thomas Watson, 8s. 9½d.; Margaret Vickerson, 8s. 6d.; Frederic Dolamore, 8s.; Isabella Langley, 6s. 3d.; Frederick Watson, 4s. 4d.; Elizabeth Machin, 4s.; Wilson Bateman, 4s.; Isabella Thompson, 3s. 9d.; George Machin, 3s. 8d.; William Vickerson, 3s. 6d.; Harry Walton, 2s. 6d.; Sums under 2s. 6d., 27s. 6d. The teachers collected the following sums:—Miss Simmons, 11s. 1d.; Miss Neasham, 8s. 6d.; Miss Pearson, 8s. 6d.; Miss Hewitson, 7s. 6d.; Miss Howie, 7s.; Miss Almack, 6s. 6d. The report was listened to with great pleasure. During the evening the children, led by the choir, sang an appropriate selection of music in a very creditable manner. Our ever ready and willing workers, Miss Neasham and Mr. Foster, were at their posts, the former at the "Kirk of Whistles," and the latter as conductor of the choir, and under their able leadership we went pleasantly and happily along. The following recitations were given by the scholars:—Margaret Vickerson, Missionary Address, from the JUVENILE, No. 1; Harriet Warnall, "The Negro's Complaint;" Elizabeth Machin, "A Plea for Cashmere;" Annie Weatherill, "Beautiful Things;" Mary Patterson, "Little Chunda and her God;" Frederick Dolamore, "A Bit of a Lemon;" Mary Ann Headlam, "The Master's Calf;" and Anne Elizabeth Kirtley, the Collection piece, No. 2 Address from the JUVENILE. The chairman gave a short address on the spiritual needs of the vast population of China, the great encouragements to ultimate success, and the duty and privilege of the Church in relation to this grand work. After this the children went round with the collecting-plates, and a handsome collection put the top-stone on to one of the best and most successful meetings ever held in connection with the Juvenile Missionary Society at Zion.

HENRY DOLAMORE, Secretary.

EBENEZER SUNDAY SCHOOL, SHREWSBURY.—Dear Mr. Editor,—On Sunday afternoon, May 5th, we held our Juvenile Missionary Meeting, which was in all respects a success. The chair was taken by our respected minister, the Rev. B. B. Turnock, M.A., who gave us a very interesting account of a journey taken by him from Tien-tsin to various country stations, when in the mission field of China. Mr. Smith, superintendent of Methodist Free Church Sunday School, gave a practical speech on mission enterprise, and showed sympathy by bringing a large number of his school to support the good cause. Our young reciters interested us greatly, and worked nobly by cards, collecting £6 18s. 2d. Mr. Laing, choirmaster, and Mr. Davenport, organist, rendered efficient aid to the vocal and instrumental part of our meeting, to whom great

praise is due. Several speakers having addressed us, the collection was made, which amounted to £2, the effort realising £8 18s. 2d., or £1 6s. 8d. more than last year. Thus ended our juvenile missionary meeting, and we separated, determining by our Master's help to work for Him while it is day with all our might.—Yours respectfully, pro Sec., W. B. E.

UNETT STREET, BIRMINGHAM.—We held our Annual Juvenile Missionary Meeting on Sunday afternoon, May 12th. The Rev. A. M'Curdy presided. As a rule these meetings are both pleasant and profitable; our last was certainly no exception. The report showed, contrary to anticipation, and in spite of the continued depression of trade, which is severely felt by many of our friends here, an increase of £1 8s. 1½d. contributed last year; the total amounted to £11 8s. 1½d. Two guineas of this sum was collected by two of our young friends (quite children), chiefly in pence. The remainder was contributed and collected by our scholars generally. In the course of the afternoon two of our junior teachers delivered very pointed addresses, which we hope will have the effect of stimulating us to greater diligence than heretofore.—F. WILLIAMS, Secretary.

BOSTON STREET, MANCHESTER.—Our Juvenile Missionary Anniversary was held on Sunday afternoon, April 28th, when our much esteemed friend, Mr. J. H. Cutter, presided. We have succeeded in raising the sum of £24, which, taking into consideration the number of scholars we have, we consider a very good amount. The meeting was addressed by the Rev. T. Scowby, Rev. E. Cato, and Mr. F. Tomlins. Recitations and suitable hymns were given, the meeting was well attended, and from the general expression we believe was greatly enjoyed. From the tone of the meeting we are expecting to exceed next year the amount obtained this.—JAMES ROSCOW, Secretary.

ZION CHAPEL, SOUTH SHIELDS.—On Sunday, May 5th, we held our Annual Juvenile Missionary Meeting, which was presided over by our respected teacher, Mr. J. Reay. There was a large attendance of friends interested in the efforts of the scholars to send the Gospel to the heathen nations. The chairman, after a few appropriate remarks, called upon our young friend Meggie Simpson, who recited the opening address (No. 1.), after which the secretary read the report, which showed a decrease on last year, owing no doubt to the depression of trade. The amount raised this year is—by cards, £1 9s. 4d.; box in school, £2 15s. 10d.; collection at meeting, £1 18s. 8d.; total, £6 3s. 10d. The Rev. M. Cotton then delivered an interesting address on our China Mission and the good work doing there, which was followed by recitations from the following:—"Man the Lifeboat," E. Underhill; "What shall I do for Jesus," Anne Drake; "The Seed and the Sower," G. Bradley; "The Lord hath need of Thee," Mary Ann Sharp; "Spread the Word," J. Sharp; "A Missionary Lesson," Ada Welch; "The Colporteur," W. Sharp; and the Address (No. 4), Julia Morris.—E. W. JOHNSTON, Secretary.

ST. DOMINGO, LIVERPOOL.—The Annual Juvenile Missionary Meeting was held in the chapel on Sunday, 12th May. Mr. H. A. Cuff presided. The Rev. J. B. Stoneman (United Methodist Free Church) and Mr. James Shone addressed the meeting, and the following recitations were given:—"A Scene from Sacred History," by Ada Ridgway, and "The Better Land," by Jessie Evans. The report read by the secretary stated

that during the year the teachers and scholars had contributed and collected as follows:—*Girls*—Boxes in Classes, £5 4s. 0½d.; Books and Cards, £6 18s. 10d. *Boys*—Boxes in Classes, £7 9s. 11d.; Books and Cards, £6 18s. 8d. Infant-Class Box, 16s. 11½d. Scholars' Service (three quarters only), 8s. Collections at Quarterly Meeting, £4 19s. 10d. Total for year, £32 10s. 10d., being an increase of £3 12s. 5d. upon amount realised during the previous year.—**GEO. BUCHANAN, Hon. Sec.,**

LORIMORE STREET.—Our Annual Juvenile Missionary Meeting was held on Friday, May 10th, when our kind friend, W. J. Denniss, Esq., again presided, who, after singing and prayer, gave us an excellent address, concluding with the following children's story, founded upon and suggested by the programme of the evening:—"On a beautiful May day in the year Eighteen hundred and seventy-eight, 'King Charles and I,' in 'The Spring-time of Youth,' went to 'The Children's Picnic.' There we learnt 'Lessons for the Young,' put on our 'Spectacles,' saw 'Jeanette and Jo,' 'A Poor Working Man,' 'The Street Arab and the Flower,' and many other 'Beautiful Things.' We were delighted with hearing 'Songs of Gladness,' and asked 'How long will it last?' this 'Love for one another.' The answer comes—'Thine Eyes shall see,' but soon comes a change—'The day arrived when baby died.' At the funeral we saw a 'Dog at his Master's Grave;' on our way home heard an 'Orphan Girl Sighing at the Recollections of a Mother,' and in her deep grief ejaculated, 'Who is like a Mother?' and to cherish her memory, gave 'An Order for a Picture.' While meditating upon these strange events I received the sad news of 'The Death of Master Tommy Rook,' which came upon me as suddenly as a 'Waterloo' shot. So I crossed my garden to the house, found 'A Goat among the Vine Leaves,' entered my house, and retired after 'Potatoes and Prayer.'"—The Secretary read the report, which showed that the sum of £2 12s. 4d. had been collected during the past year, as follows:—Miss Leworthy's Class, 9s. 2d.; Miss Annie Wood's Class, 6s. 10d.; Miss Wood's Class, 2s. 6d.; Mr. George Burroughs's Class, 2s. 2d.; Mr. Rolfe's Class, 2s. 1d.; Miss Soulby's Class, 2s.; Miss Collett's Class, 1s. 6d.; Mr. Morris's Class, 1s. 4d.; Miss Occomore's Class, 1s. 2d.; Mrs. Lane's Class, 8d.; Mr. Thripp's Class, 8d.; Smaller sums, 3s. 1d.; Mrs. Brittain's Box, 5s. 7d.; Mrs. Austin's Box, 2s. 2d.; By Cards—Agnes Bolton, 2s. 3d.; Arthur Beverton, 1s. 10d.; Alice Chilman, 1s. 7d.; Emily Garrett, 1s. 3d.; Frederick Berry, 1s.; Elizabeth Rumsey, 1s.; Margaret Borders, 1s.; Smaller sums, 1s. 6d. After which the children recited and sung the special pieces mentioned in the foregoing story, under the leadership of Mr. James Wood, to whom we are again greatly indebted. Miss Rosa P. Henman accompanied on the harmonium. The collection amounted to 16s. 8d., making a total of £3 9s., which is considerably less than last year, although all things being considered it is very good. A vote of thanks was moved and seconded to our chairman. This with singing and prayer brought a very pleasant meeting (although small in numbers) to a close. I hoped that if spared another year we shall do much better for our friends who are carrying on such a successful work.—**GEORGE BURROUGHS, Secretary.**



THE OWL.

THE OWL.



BIRDS generally are beautiful creatures. They are beautiful both in form and plumage, and many of them are beautiful songsters as well. But our friend the owl is an exception to the rule. He can scarcely be called a beautiful bird. Neither in form nor plumage is he an attractive creature, and his voice is anything but charming. Taking up a periodical but yesterday we find him thus addressed :—

“What art thou, say, a bird, or beast, or what?
 Leering from that old plane tree's hollow stem!
 Thine eyes have something criminal in them,
 And thy hooked beak suggests a chilling thought
 Of midnight murder of sweet sleeping things,
 Dreaming with delicate heads beneath their wings,
 And of thy hideous presence knowing not
 Till thou dost swoop! . . . I scarce can look at thee
 Without a shudder.”

Our picture seems to justify this repulsive description of the owl. His leering eye seems to have something criminal, because cruel, in it, and his hooked beak suggests a chilling thought of midnight murders which he has committed or is ready to commit. Some of the fruits of his cruelty are lying at his feet.

And as he is not a favourite with human kind, neither is he with his own kind, if birds generally are to be reckoned among his kindred. The one in the picture has evidently no liking for him, and seems to be terrified by his presence. None of the birds, we should think, envy the owl, or would wish to change places with him. Still the owl is not to be blamed for what he is. He did not give himself his sullen, cruel nature, and we do not suppose that he has power to change or modify his native disposition. In this we are not like birds or animals. By birth we may come into possession of naughty tempers, but to us is given power to control them. And then we can get rid of the bad hearts we have by nature, and have new ones, hearts which shall be full of love to God and love to man.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 120.

FROM TED INSTONE TO BEN BARLOW.

3, Brighton Villas, Regent's Park,

London, July 17th, 187—.

DEAR BEN,—

I should think your friend Thornton is setting up as a sort of temperance missionary. He is enterprising enough certainly. He joins a Band of Hope, asks you to attend one of their meetings, gets you to sign the pledge, reckons on your influence with me being strong enough to persuade *me* to follow your example, and forthwith he proposes that we should open a branch teetotal establishment at Waterside House.

Well, I have thought over the matter, and it really does seem safer to take the pledge. I have noticed at parties, where wine has been handed round, if anyone said, "No, thank you; I am a teetotaler," he was not asked again; whereas if one said, "No, thank you, I don't care for any," he would be pressed again and again, and bothered until he consented to drink.

I can quite believe what Mr. Carson told you about young men in London being ruined by drinking. Only last week John was telling me of one of the clerks at Somerset House being sent off without notice for the same cause. He was a very clever young fellow, and had a first-rate situation with excellent prospects. John says that is the third clerk in one office dismissed through drink since he went there.

So I think I have no objection to sign the pledge on my own account, and if you are willing, and Dr. Tasker doesn't object, I am quite agreeable to try what we can do in starting a temperance organisation of some sort at school. I daresay we shall get laughed at considerably, but that won't hurt us much I expect. I, at least, can't complain if I now get a share of the ridicule I formerly bestowed so liberally on others. You must ask Thornton to procure us a pledge-book, and give you all necessary instructions as to the *modus operandi*. Am I not getting a "prig" to quote Latin in a letter?

With love and good wishes to all, I remain yours truly,

TED INSTONE.

Letter No. 121.

From BEN BARLOW to DR. TASKER.

The Laurels, Woodbourne,
July 18th, 187—.

DEAR SIR,—

I hope you will excuse my troubling you, but I wish to ask if you have any objection to the formation of a Band of Hope among those of your scholars who are total abstainers.

An old schoolfellow of mine is secretary of such a society in this neighbourhood. Through his influence I and Edward Instone (who has met him when on a visit here) have decided to take the temperance pledge. He thinks others of our schoolfellows might like to do so, and that we might hold meetings once a week for temperance recitations, addresses, &c.

We shall not venture on establishing the proposed Band of Hope unless we get, not your consent merely, but your approval of the scheme, for we feel sure you are better able to judge of its advisability than we are.

With kind regards, I am, dear sir, yours respectfully,
BENJAMIN BARLOW.

Letter No. 122.

From DR. TASKER to BEN BARLOW.

Waterside House, Worcester,
July 19th, 187—.

DEAR BENJAMIN,—

Your letter has given me unqualified pleasure. I am not a total abstainer, but I shall be glad to countenance and encourage you in the project you name.

I will arrange for you to have one of the class-rooms for your weekly meetings, and I have no doubt there will be a sufficient number of your fellow pupils willing to help you.

With kind regards to yourself and your parents, I remain yours truly,
W. TASKER.

P.S.—Since writing this it has occurred to me that Mr. Macpherson is a total abstainer of long standing. I do not doubt he would become president of your Band of Hope. I will ask him.

Letter No. 123.

From BEN BARLOW to TED INSTONE.

The Laurels, Woodbourne,
July 20th, 187—.

DEAR TED,—

Hurrah! We shall have a Band of Hope and no mistake! When I got your letter I thought it would be as well to ask the

Doctor's opinion at once, so I wrote to him. He is quite in favour of our scheme, and is going to ask Mr. Macpherson to be president.

I got all necessary instructions from Charlie Thornton last night, and Mr. Carson was so kind as to present me with a pledge-book to start with, and also a book of temperance melodies.

Four days longer and we shall be at Worcester together, I hope, safe and well. So till then I remain, with kind regards to all, yours very truly,

BEN BARLOW.

Letter No. 124.

From TED INSTONE to BEN BARLOW.

3, Brighton Villas, Regent's Park,
London, July 22nd, 187—.

MY DEAR BEN,—

Your letter somewhat startled me. Is it your own courage or mine that you were afraid of? It looks as if you took the earliest opportunity of committing us both to the establishment of a Band of Hope, as if afraid we might let it drop. Perhaps it is as well you did, though my idea was to get the opinion of the boys on the project first. However, we shall not be long in ignorance of their ideas on the subject, for, like most boys, they have a very direct way of expressing their likes and dislikes.

We are glad to see by your father's letter, to hand this morning, that Ernie is still better, notwithstanding the oppressive heat. I hear whispers of a trip to Brighton with him. I tell Ma it is too bad to arrange a sea-side trip now that I am just going back to school.

I am already packed up to start by the first through express on Monday morning. I daresay you will not arrive much earlier than I.

With kind regards, your old friend,

TED INSTONE.

Letter No. 125.

From BEN BARLOW to MRS. BARLOW.

Waterside House, Worcester,
July 24th, 187—.

MY OWN DEAR MOTHER,—

I got here all right, just in time to sit down to dinner with the first arrivals. So far we seem to be much the same as last half, but there are one or two new boys expected.

My friend Ted arrived just before me. He says his Pa and Ma are thinking of having a trip to the sea-side, and they will take Ernie with them if father thinks the journey won't be too great a fatigue for him. Ted says it is hardly fair of them to make these arrangements now that he cannot go with them. He has only seen

the sea a few times. You see, in consequence of Ernie's continual illness, they haven't been able to go out much.

Give my love to Ernie and all at home, and believe me your affectionate son,
BEN.

Letter No. 126.

FROM BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
August 4th, 187—.

MY DEAR CHARLIE,—

We held our first Band of Hope meeting last night, and I take this first opportunity of reporting it.

We did not find nearly so much difficulty in starting it as I expected. But perhaps one reason was that before we mentioned the matter to a single pupil we got Mr. Macpherson to be president of the proposed society. By his advice I wrote a text-hand notice, stating that we intended starting a Band of Hope, and asking all willing to join to meet in the large class-room after tea.

About twenty came. After being voted to the chair, Mr. Macpherson stated our object in greater detail, and asked all teetotallers to show their hands. Nine hands went up at once. He then invited these nine, and as many more who liked, to sign the pledge in our new pledge-book. After a deal of delay we got fourteen names down.

We then set about organising the society. Mr. Macpherson accepted the post of president, and Ted Instone was unanimously voted to the vice-chair. They made me secretary, and elected a committee of six besides the officers. We decided to hold the meetings once a fortnight during the summer months, and once a week in the winter. A programme was arranged for a temperance entertainment for Thursday week, and the meeting broke up with every prospect of future success.

I shall be glad to hear that your society is progressing favourably. Try and find time to write a letter next week.

Ted joins me in kind regards and good wishes. Yours truly,
BEN BARLOW.

Letter No. 127.

FROM MRS. BARLOW to BEN BARLOW.

The Laurels, Woodbourne,
August 8th, 187—.

MY DEAR BEN,—

As your friend intimated, Mr. and Mrs. Instone have resolved to take Ernie to the sea-side for a month. Mr. Instone came up on Saturday to make the arrangements. Your father says any little fatigue he may feel on the way will be more than balanced by the

invigoration resulting from the pure sea air and thorough change of scene.

They have fixed on Weston-super-Mare, as the journey from here will not be too long for Ernie, and it will also be sufficiently near London to enable Mr. Instone to run down on Saturday afternoon, and spend Sunday and sometimes Monday with them.

Your father insists on me and your sisters going too, and I have consented to go for part of the time at any rate. But I think I shall return in a fortnight. Your dear father has to be up at all hours, and unless I am at home I should not feel sure he would take sufficient care of himself in the matter of regular meals and sufficient rest.

Bob is quite down-hearted at losing Master Ernie for a month. He would have liked to have gone with him. Indeed Mr. Instone said if he could be spared he should go. He is very pleased to see Bob's attention to his little son, and the other day had a long talk with him about his supposed parents and such like. We should have been very glad for Bob to have gone to Weston, both for his own sake and for Ernie's, but of course he could not be spared. Indeed, much as he would like to go, I'm sure he would not leave his horse to the care of any other ostler, unless it was the man from the Mill, whom he thinks a trustworthy groom.

We purpose going to Weston on Friday, and as I have many things to get ready for the trip, the next letter you get will probably be directed from that place.

All send love. Your affectionate

MOTHER.

Letter No. 128.

From C. THORNTON to BEN BARLOW.

High Street, Woodbourne,
August 12th, 187—.

DEAR BEN,—

Thanks for your letter. You must be very pleased with the success of your first Band of Hope meeting, I should think. Of course some few who are attracted by the novelty of the thing will give up in a few weeks, but their numbers are sure to be more than made up for by others. I told Mr. Carson how well you had begun. He seemed very pleased.

We are not doing quite so well at our Band of Hope. You see we can't get the young folks to attend regularly while the nights are so bright and the weather so delightful for rambles. We have had to hold the meetings fortnightly instead of weekly, but in about six weeks we shall make another good start, and get in good working order for the winter.

I was to have played in a cricket match here this afternoon, in Tom Blunt's eleven, but I was detained at the office a little later, and they had to begin without me. When I did come the other side

wouldn't allow me to go in ; so I acted as umpire for our side. After all their sharp practice they lost the match by fourteen runs.

Blunt plays capitally now. He is good at anything—bowling, wicket-keeping, or batting ; but it is in the last named that he shows up most. His big hits are the talk of Woodbourne, I can tell you.

Give my hearty congratulations to *Vice-President* Instone, and believe me, my dear *Mr. Secretary*, yours very truly,

C. THORNTON.

PAPERS FOR THOUGHTFUL BOYS.

By THOS. STONELEY.

XIX.—ENGINEERING—THE STEAM-ENGINE.



IN this paper we propose to make our young readers acquainted with some of the chief particulars relating to the invention of the steam-engine.

The steam-engine is a wonderful machine. Its powers have worked upon the face of the earth a revolution, compared with which all the changes among nations are as nothing. It is auxiliary to the arts relating to the food of man, as a power in agricultural operations, in our great sugar-works, bakeries, and other establishments for the preparation of articles of diet. It supplies the staple power for our countless factories for spinning, weaving, calico-printing, dyeing, and other operations connected with the production of clothing. It cuts and shapes timber, stone, iron, and other material for our dwellings ; and where the operations of the builder are conducted upon a sufficiently largescale, it performs the heaviest labour connected with the operation of building itself. It supplies water to our dwellings, and affords boundless power for all operations of drainage and irrigation. It has revolutionised our systems of travelling, both by land and water, and, finally, when mind has done its work in preparing intellectual food for expectant thousands, it enables the printing machine to pour forth the results and elements of thought before which the early triumphs of the printing-press itself seem but a small advance upon the pen of the monastic scribe.

Like all great discoveries, that of the motive power of steam, and the important uses to which it might be applied, was the work, not of any one mind, but of several minds, each borrowing something from its predecessor, until at last the first vague and uncertain idea was developed into a practical reality. Known dimly to the ancients, and probably employed by the priests in their juggleries and pretended miracles, it was not till within the last three centuries that any systematic attempt was made to turn it to useful account.

But before we turn our attention to the persons who made, and, after many failures and discouragement, *successfully* made, this attempt, it will be advisable we should say something as to the principle on which their invention is founded.

Our young reader will know that gases and vapours when imprisoned within a narrow space do struggle as resolutely to escape as did Sterne's starling from his cage. Their force of pressure is enormous, and if confined in a closed vessel they would speedily rend it into fragments. Let some water boil in a pipkin whose lid fits very tightly; in a few minutes the vapour or steam arising from the boiling water, overcoming the resistance of the lid, raises it, and rushes forth into the atmosphere. Take a small quantity of water, and pour it into the hollow of a ball of metal. Then with the aid of a cork, worked by a metallic screw, close the opening of the ball hermetically, and place the ball in the heart of a glowing fire. The steam formed by the boiling water in the inside of the metallic bomb, finding no channel of escape, will burst through the bonds that sought to confine it, and hurl afar the fragments with a loud and dangerous explosion.

These well-known facts we have presented simply as a proof of the immense mechanical power possessed by steam when enclosed within a limited area. Now, the questions must have occurred to too many, though they were themselves unable to answer them;—why should all this force be wasted? Can it not be directed to the service and uses of man? In the course of time, however, human intelligence *did* discover a sufficient reply, and *did* contrive to utilise this astonishing power by means of the machine now so famous as the steam-engine.

Let us take a boiler full of water, and bring it up to boiling point by means of a furnace. Attach to this boiler a tube, which guides the steam of the boiler into a hollow metallic cylinder, traversed by a piston rising and sinking in its interior. It is evident that the steam rushing through the tube into the lower part of the cylinder, and underneath the piston, will force the piston, by its pressure, to rise to the top of the cylinder. Now let us check for a moment the influx of the steam *below* the piston, and, turning the stop-cock, allow the steam which fills that space to escape outside; and, at the same time, by opening a second tube, let in a supply of steam *above* the piston. The pressure of the steam, now exercised in a downward direction, will force the piston to the bottom of its course, because there will exist beneath it no resistance capable of opposing the pressure of the steam. If we constantly keep up this alternating motion, the piston, now rising and now falling, we are in a position to profit by the force of steam. For if the lever, attached to the rod of the piston at its lower end, is fixed by its upper to a crank of the rotating axle of a workshop or factory, is it not clear that the continuous action of the steam will give this axle a continuous rotatory movement? And this movement may be transmitted by means of bands and pulleys

to a number of different machines or engines, all kept at work by the power of a solitary engine.

This, then, is the principle on which the inventions of Papin, the Marquis of Worcester, Newcomen, and James Watt have been based.

Denis Papin, the ingenious Frenchman, it was who, in 1707, constructed a steam-engine on the principle we have just described.

At a later period Newcomen, a native of Dartmouth, in Devonshire, conceived the idea of employing the same source of power. But previously the value of steam, if employed in this direction, had occurred to the Marquis of Worcester, who, for his loyalty to the cause of Charles I., had been confined in the Tower of London as a prisoner. We are told that on one occasion, while sitting in his solitary chamber, the tight cover of a kettle full of boiling water was blown off before his eyes; for mere amusement's sake, he set it on again, saw it again blown off, and then began to reflect on the capabilities of power thus accidentally revealed to him, and to speculate on its application to mechanical ends. Being of a quick and ingenious turn of mind, he was not long in discovering how it could be directed and controlled, and his persevering efforts resulted in a little engine of some two-horse power which he had at work raising water from the Thames at Vauxhall.

The next progressive step was taken by Captain Savery towards the close of the seventeenth century. To him we owe the invention of a vacuum. We then come to Thomas Newcomen, a blacksmith, who carried out the principle of the piston in his atmospheric engine, for which he took out a patent in 1705. To James Watt, however, will always be given the honour of inventing the steam-engine. Those whose names have been mentioned, and others, had made sufficient progress in this mighty power to construct engines of great value for pumping water from mines; but, with the exception of a very limited use in pumping water for the supply of towns, in working blast furnaces for the smelting of iron-ore, and in impelling mills by the round-about process of pumping up water to drive water-wheels, this, owing to its very rude and imperfect construction, was the only purpose to which the steam-engine was applicable before the improvements of Watt, while its wasteful consumption of fuel precluded its employment altogether where coal was not very plentiful and cheap. Watt investigated the principles of its action, remedied the enormous waste of power in its working by the admirable expedient of a vessel for condensing the steam distinct from the cylinder in which it acted as a motive power; greatly increased the efficiency of the machine by causing the steam to act alternately on both sides of the piston, instead of underneath it only, as in the earlier engines; rendered it by means of the *governor* for regulating the supply of steam according to the speed of the machine, self-adjusting in its action; and, finally, by the addition of the crank and fly-wheel, or, when debarred from the use of the crank by the trick of a jealous rival, by the beautiful contrivance of the sun-and-planet wheel, converted the

alternating rectilinear motion—i.e., motion bounded by *straight* lines—into a uniform steady rotatory motion, fit for application to the most delicate machinery. “It was by his inventions,” to adopt the language of Lord Jeffrey, “that its action was so regulated as to make it capable of being applied to the finest and most delicate manufactures, and its power so increased as to set weight and solidity at defiance. By his admirable contrivances it has become a thing stupendous alike for its force and its flexibility, for the prodigious power it can exert, and the ease, and precision, and ductility with which it can be varied, distributed, and applied. The trunk of an elephant, that can pick up a pin or rend an oak, is as nothing to it. It can engrave a seal, and crush masses of obdurate metal like wax before it; draw out, without breaking, a thread as fine as gossamer; and lift a ship of war like a bauble in the air. It can embroider muslin and forge anchors, cut steel into ribands, and impel loaded vessels against the fury of the winds and waves. Such results were not the achievement of a single happy thought or exercise of ingenuity, but of a life devoted to the pursuit of a great object, with the steady determination to conquer every difficulty, physical and moral, which impeded his course; and he found enough of both to have disheartened any ordinary man. He himself was often near abandoning altogether his ingenious scheme. In 1769, his spirit being embittered by hearing of an attempt to appropriate his inventions, he wrote to a friend:—“I have resolved, unless these things that I have now brought to some perfection reward me for the time and money I have lost on them, if I can resist it, to invent no more. Indeed, I am not near so capable as I once was; I find that I am not the same person that I was four years ago, when I invented the fire-engine, and foresaw, even before I made a model, almost every circumstance that has since occurred. I was at that time spurred on by the alluring hope of placing myself above want, without being obliged to have much dealing with mankind, to whom I have always been a dupe. The necessary experience was wanting, in acquiring which I have met with many disappointments. I must have sunk under the burthen of them if I had not been supported by the friendship of Dr. Roebuck. I have now brought the engine near a conclusion, yet I am not in idea nearer that rest I wish for than I was four years ago. However, I am resolved to do all I can to carry on this business, and if it does not thrive with me I will lay aside the burthen I cannot carry. *Of all things in life there is nothing more foolish than inventing.*” And on the 31st of January, 1770, he said: “To-day, I enter into the thirty-fifth year of my life, and I think I have hardly done thirty-five pence worth of good in the world; but I cannot help it.” Such was the desponding view taken by this great benefactor of mankind of those labours by which his name has since been rendered so famous. His subsequent removal to Birmingham, and his partnership with Mr. Boulton, opened a new and happier era for the dreaming maker of instruments, who now become a practical maker of engines on a large scale. The Soho works speedily became

famous all over England. Yet, in 1790, Watt and Boulton were still out of pocket by his inventions, and as late as 1783, when the former was forty-seven years old, they had reaped no profit. But for an Act passed in 1775 to continue the rights of the patentees to the year 1800, in consideration of the great utility of the invention, the inventor must have been entirely deprived of the reward of his labour.

When, at the close of Watt's honourable career, the most eminent of Britain's philosophers and politicians met at Freemason's Hall to raise a monument to his memory, his inventions were deservedly referred to by Davy as among the great means whereby Britain had been enabled to display, during a long war, power and resources so infinitely above what might have been expected from the numerical strength of her population.

From what the steam-engine has done, is doing, and yet bids fair to do for the service of the world, we need but glance at our factories, our railways, our rivers, and the mighty vessels which are already beginning to bring distant continents into a proximity closer, for all practical purposes, than was realised by the extremities of our own little island some few centuries ago.

Since Watt's time innumerable patents have been taken out for improvements in the steam-engine; but his great invention forms the basis of nearly all of them, and the alterations refer rather to details than principles of action. The application of steam to locomotive purposes, however, led to the construction of the high pressure engine, in which the cumbrous condensing apparatus is dispensed with, and motion imparted to the piston by the elastic power of the steam being greater than that of the atmosphere.

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

VIII.—FORGIVENESS AND REVENGE.

“Revenge is sweet.” “Forgiveness is the noblest revenge.”



O whom is revenge sweet? Surely it must be to a taste that is morbid and a heart that is miserable. To a man of noble soul and generous emotion revenge is painful and irrational. Jesus said, “Love your enemies; bless them which curse you.” A Hindoo, on hearing these words, said, “How beautiful! how divine! This is the truth, this is the truth.” One proverb says, “Revenge in cold blood is the very act and deed of Satan.” It is quite true, and not a bit too strong, to say

that such revenge is as bad as an act of Satan ; but the guilt cannot be thrown off man's shoulders and put upon Satan's.

There are men and women who have in their memories long rows of pegs on which to hang grudges of all sorts and sizes. And the pegs are mostly full ; often, indeed, they are like the pegs in our schools at a Christmas tea-party, with the hats and caps piled one upon another. So these grudges are heaped upon the pegs of memory. Some people never forgive. This is their boast. They pride themselves upon their dignity and spirit. It must be admitted that they are spirited, but their spirits are mostly "illicit," and hurtful alike to themselves and to others.

Of course these people who never forgive never do wrong themselves ; they are infallible and innocent souls. Whoever caught them in error, or saw a stain on their robes, or heard a discord in the melody of their sweet lives ? They are the very cream of society, the very flowers of the human race—that is, in their own opinion ; *everybody* does not say so, and few people believe those who do. Another proverb says, "The offender never pardons." Why not ? Is it because he needs so much mercy himself that he thinks there is none to spare for others ? Scarcely so ; for he is about the last man in the world to think that *he* needs much mercy, if any at all. He exults in the contemplation of his surpassing excellence, and if he deigns to notice another at all it is to speak of him as "this sinner."

Revenge may be sweet to some at first, but it soon becomes bitter. It is like the "little book" given to John on the Isle of Patmos. In his mouth it was sweet as honey, but in his belly it was bitter. There is much to be learned from this somewhat extreme saying—"Pardon all except thyself." With thyself be stern, rigorous, and vigilant ; lay no flattering unction to thy own soul ; never whitewash the foul blots on thy character ; never wink at thy own failings. On the contrary, seize by the throat that rising passion, and stop its breath at once ; put thy foot firmly upon that spark of pride, lest it spread into a flame ; choke that foul spirit of envy. Weep honest tears over that cutting reply, or cruel sneer, or ungenerous suspicion, or paltry slander, by which thou hast sent through all the fibres of a sensitive and noble soul many a thrill of agony. Reserve thy sharpest arrows for thy own folly, strike thy heaviest blows at thy own ignorance. Pardon anybody, everybody, sooner than thyself. But in pardoning others do it promptly, sweetly, thoroughly. A story is told of an old man who had cherished a spirit of revenge toward one foe for many, many years. This old man was very ill, and he was urged to forgive his enemy, but he stoutly refused. Death came nearer ; again he was asked to forgive. "Yes," he said, "I will forgive my foe ; but if I recover, the affair must stand as it stood before." Not such must be our forgiveness. It must be hearty and irreversible, and *let it be speedy*.

There is much truth in these two proverbs—"A green wound is soon healed ;" "It is ill healing an old sore." Revenge is sour, not

sweet, and the longer it is kept the sourer it becomes. The oldest grudges are the worst of all. To my mind it is a marvellous thing that any human being should be unwilling to forgive a penitent brother, or sister, or child. But it is far too common a thing. It is said that Henry II. had a rebellious son. By his wild and wicked conduct this lad had brought shame and sorrow to his father's heart and home. Sickness befel this youth—"he came to himself," his heart was melted into contrition. He yearned for his father's pardon before he died. The King was told of this, but he refused to visit his son, to send a message, or to grant a pardon. The poor prodigal died beneath the cloud; asking for bread, his father gave him but a stone. Now would the kingly glory of the father have been at all dimmed by a visit to his rebel child and a full forgiveness? If it be human to err, is it not divine to forgive?

"The quality of mercy is not strained.

It is twice blessed—

It blesses him that gives and him that takes.

It is mightiest in the mightiest; it becomes

The thronèd monarch better than his crown."

He who is the King of Kings and Lord of Lords is such in mercy, and ever ready to forgive his penitent children. So let us be tender-hearted, forgiving one another, even as God for Christ's sake hath forgiven us. No doubt we all meet with much that is trying and provoking, and it will cost a struggle sometimes to keep back the angry reply. We make enemies often when we do our best and noblest. The man who never makes an enemy is, as a rule, not good for much. He is likely to be a colourless, insipid, namby-pamby fellow, that may be worked into any shape by anybody; who is as incapable of winning the trust and love of a noble and sterling friend as he is of exciting the hostility of a relentless foe. It is a good thing, in the midst of enemies, perils, falsehoods, and sneers, to go right on in the path of duty. These things are like sparks, which, if you will not blow them, will soon go out. Most men are too much influenced by what others think about them and say about them, and too little by what God thinks and says. A good man need not fear lest his character should be taken away. "The character of a good man is like a lifeboat: if left to itself it will right itself." At any rate, no good can come from throwing scorn for scorn, hate for hate, lie for lie, mud for mud. Possibly most of us know what it is to suffer from the crosses, slights, insults, slanders, cold looks, and cutting words of others. What, in the face of such conduct, is our duty? Is it to fly into a towering passion or to nurse our little spite? Surely not. Are we then to blunt and deaden our feelings so that baseness, scorn, and falsehood shall fail to sting us? Surely not. Are we to put on a smiling face, to speak and act blandly and smoothly, while our hearts are quivering and writhing with vexation and agony? Surely not. Some people never smile so much as when

they are vexed. I prefer the sternest frown to such hollow, hateful smiles. Are we to fling ourselves under the feet of our foes, and become cringing, craven worms, not daring to say that we have a soul of our own? By no means. Yet, while maintaining our dignity, freedom, and self-respect—yea, while keenly smarting under a sense of wrong, we are to pray for the spirit, and pray in the spirit of Him who for His very murderers thus pleaded, "Father, forgive them, for they know not what they do." Men talk loftily about defending their honour, but I should like to know what act of revenge, done in defence of honour, ever equalled in true dignity and nobleness that sublime prayer of Stephen's. When his enemies rushed on him in rage, stopping their ears, gnashing their teeth, railing on him with their voices, crashing in his brains with the stones, he said, "Lord, lay not this sin to their charge." Don't talk of revenge being sweet! Even if it were, forgiveness is immeasurably sweeter. Truly and wisely has Bacon said that, "in taking revenge a man is but even with his enemy, but in passing over it he is superior." Let us rise far above the false and foolish notions of honour which have so long ruled the world, and let us listen to that sweet singer, still among us, who says—

"Howe'er it be, it seems to me
 'Tis only noble to be good;
 Kind hearts are more than coronets,
 And simple faith than Norman blood."

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXIX.—MARINE ANIMALS.

WE have had many illustrations of the vast extent to which Nature is replenished with inhabitants. The air is peopled with teeming numbers and endless varieties of organic beings. Others live on the surface of the earth, and flourish in the fields and meadows and hills. There are innumerable families in the deep recesses of the woods, the hearts of leaves, and under the bark of trees—every inch of the world is populous as a crowded city. But all these creatures, so different from each other in their structure and their manner of life, have one circumstance in common—they all alike breathe the vital air, and they all die as soon as plunged into the water. Is it then impossible for organic beings to live in the water? Is that fluid element that covers two-thirds of the globe entirely destitute of inhabitants? Quite the contrary. We have seen how a profuse vegetation flourishes there, and we are now to behold in the waters such a vast variety of tribes, from animals of microscopic size to the largest of the crustacea, with fishes that vary from the minnow to the whale, many of them existing gregariously in numbers

that defy the most elaborate computation, that in reality all the populations of the earth are quite insignificant in comparison. And as the animals that live on the earth die in the water, so the inhabitants of the waves perish in the air, and cannot exist out of their natural element. Terrestrial animals are furnished with hair or feathers or furs or some other protection, and adapted in their varying structures to the conditions of their existence. So marine animals have an organisation wonderfully adapted to their circumstances. Their habits and instincts therefore, and the way in which a proper supply of food exactly suited to their needs is always within their reach, will illustrate at once the wisdom and power of the Creator, and the goodness that pervades all the arrangements of Nature.

Without pretending to any strict scientific order or classification, it will be well to move along the lines that naturalists have laid down, and advance from the simpler forms of existence to the larger and more complex.

Of these elementary structures there are so many that the usual expressions of hyperbole, "as the stars of the heavens, and sands of the sea-shore innumerable," are ludicrously inadequate. You may take up a handful of sand from the neighbourhood of low-water mark, and with the aid of a microscope perceive either living things, or the traces of them, by the thousand, and a single sea-weed often contains a larger population than Liverpool or Manchester.

The wood zoophyte is used to describe some of the more elementary forms of marine life. It is a compound of two Greek words which signify animal and plant, and is applied to a large number of organic beings that are best described by calling them animal-plants. They have the appearance of plants or flowers, but are really animals, and some of them possess the power of self-defence in stinging the hand that touches them. Some of them also are phosphorescent; when irritated or disturbed they emit a light of considerable brilliance. The zoophytes abound in great numbers on all our coasts. One remarkable thing about them, that in part explains their great numbers, is that when mutilated or partially destroyed they have the power of repairing immediately the mischief that has been done, by producing fresh organs to correspond with those removed. If cut in two each part supplies what is lacking, and two perfect specimens instead of one soon appear.

Everyone has heard of the coral islands of the South Sea. Some of them are a thousand miles long, and three or four hundred across, and these immense structures are reared by marine animals small in size and simple in organisation. No better illustration can be found of the power of co-operation, or of the truth of the old adage, "Union is strength." The currents of the ocean bring to these industrious creatures the materials with which they labour. These materials consist of mineral substances carried down by the rains of remote continents to the sea. They separate from the sea-water what they require for their building operations, and with incessant toil they

construct islands of surpassing beauty and solid and enduring strength. Great encouragement may be drawn hence for the virtuous exertions of little people. When united together, and rightly directed, they will be enabled to produce beneficial results on which others may build with security long after they themselves have disappeared and are forgotten.

Those curious creatures, stranded by the receding tide, that look like a mass of jelly newly turned out of a mould may have been seen at times by many of my readers. I have often seen them of various size and colours on the Southport beach, and on the coasts of Durham and Yorkshire. That jelly-like mass is animated; it possesses life, power of locomotion, perception. It is composed of cells filled with a transparent or semi-transparent fluid. In the various species the cells are differently arranged, and differ in number. When they move through the water they move by alternate contraction and expansion like the opening and closing of an umbrella. In the beautifully clear waters round the Channel Islands they may often be seen, some of them perfectly white, others of a red or brownish hue. There is a species of them, though they are not found in our neighbourhood, which propel themselves forward by a movement exactly identical with the paddles of a steamship.

The star-fish abounds in our waters, and may be found often enough. It is much more complex than the animals already mentioned, and possesses on one side of it a hard and spiny skin of the nature of shell. From its centre five longish rays proceed, and each ray has a multitude of suckers, which serve as both hand and foot, for they enable it to move from place to place, and also to convey its food to its mouth. The star-fish has a remarkable power of self-destruction. Has any of my readers ever picked up one on the sea-shore which was not short of one or more of its points? To find a perfect specimen is almost as impossible as to find the philosopher's stone. As soon as removed from their element they proceed to break themselves into pieces. At the slightest touch of the human finger they will reject part of themselves. It is from this amongst other circumstances that naturalists are generally agreed that these lower forms of existence are quite unconscious of pain. We can understand its existence in the higher grade of life, because there it stands a sleepless sentinel to give the alarm when danger threatens; but of what use could it be in such creatures as those already mentioned? And we may be sure that if sensibility to pain could be of no practical use, the Almighty would not endure them with it.

We have yet to consider the more important of the marine animals, but already we are warranted in making the reflection of the Psalmist, whose delight it was to meditate on God's works, and talks of His doings: "How manifold are Thy works! in wisdom hast Thou made them all; the earth is full of Thy riches. So is this great and wide sea, wherein are things creeping innumerable, both small and great beasts."

THE PRISONER'S CHILDREN.

By MRS. MELDRUM, *Author of "NED'S SEARCH."*

CHAPTER X.—HOME AGAIN.



OW let us return to the unhappy Tomlins. Naturally a man of generous temperament and incapable of meanness or brutality, he was no sooner sober than he bitterly lamented the rash act which had so nearly cost his fellow-workman's life. That it had cost his own liberty he felt and felt keenly, for the thought of his helpless children almost maddened him. What prospect had they but the workhouse? None that he could see. The idea of those two keeping the home and themselves never entered his imagination. He was a loving father, too, when free from his besetting sin, and many a time in his narrow cell did he long to feel Willie's thin face against his own, and to press his crippled form to his breast.

And yet painfully few had been the caresses that had fallen to the children's share since their mother's death, for closer and closer the chains of intemperance had clasped themselves round the father's heart, binding his hands as with iron fetters from the comfort and sustenance of his offspring.

Over and over as Tomlins trod out the weary routine of prison labour did he reckon and reckon again the comforts he might have had around him but for this unconquered foe. Well, it should be mastered; he could live without the drink here, and he would when free again. Free! The very word made him raise his head as if to breathe once more the air of heaven, but in vain. High walls and whitened roofs alone met his eye, and despair threatened to overwhelm him as he remembered that ere he was free long months must pass, and his repentance might come too late to save his children.

But time passed on, month after month, till all the months were gone, and Tomlins found himself once more outside his place of captivity.

At first the noise and tumult almost stunned him, and he stood bewildered; then, noticing that the passers-by were marking him amongst the rest of those just discharged, he pressed his hat more closely on his head and hurried forward in the direction of home. Crossing the road, he was checked by the sudden stopping of one of the many country carts which were passing to and fro, supplying the market people with field and garden produce. The man was just handing out a large flat basket filled with delicate primroses, and he heard him say, "Them's beauties now, if you like, and Bernard gathered 'em all hisself." There appeared to be no payment, and Tomlins wondered in a sort of careless way who had received so sweet a gift. And even as he wondered the cart drove on, he planted one foot on the curb-stone, looked down at the flowers and their owner, and met the joyful words and welcome of his own Lucy.

"Oh, father, father, is it you?" was all she could say, as she threw her arms round his waist and looked up in the face where now was neither drink nor anger.

"Yes, child, it's me," and he stooped and kissed her.

Then, as she picked up the basket and pulled him by the hand, exclaiming, "Let's be quick to Willie!" he took it from her, asking, fearful of the answer, "Is he ill? Is he in the—the workhouse?"

"Oh, no, father. He's at home. We never went there; we kept ourselves all the time; but he isn't well, Willie isn't." And Lucy walked more slowly for a minute, till pleasure took the helm again and her feet quickened their pace.

"Willie did want to come; it's the first time he's missed. He will be disappointed, he did so want to see you first thing."

Tomlins said nothing, but his heart ached to think how these children cared still for him after all his neglect and worse ill-treatment in days gone by. And as Lucy told of all their trials and difficulties, he resolved that as far as in his power lay such should never meet them again.

It was a touching meeting between the father and son; but the father's heart sank as he saw the alteration in Willie's appearance.

But a change for the better rapidly took place as Willie realised his father's return. He sat up and enjoyed the breakfast Lucy hastened to provide, and when she returned to sell her flowers, which she insisted upon doing, he entertained his father with a fresh account of their faring during his absence, Mr. and Mrs. Kelly and Bernard coming in for a warm share of praise.

"It's Band of Hope to-night, Lu," said Willie, as they sat round the tea-table that afternoon.

"Yes, I know," she answered, giving Willie a sign to avoid so uncongenial a topic, but the boy went on.

"Father, me and Lu go to Band of Hope now; we can go, can't we, father?"

"If you're strong enough, my lad, it won't be me that'll stand in your way."

"Do you know what it is, father?" Lucy ventured.

"Yes, I know, and a good thing it is too. I'll carry you, Willie, on my way, for I must be seeking something to do."

As soon as Willie had an opportunity he whispered to his sister to ask their father to go with them to the meeting, but Lucy begged him not to urge it till he had recovered from the signs of prison life. "He wouldn't go, Willie—he'd be ashamed of 'em all seein' his hair short; wait a while an' I dare say he'll go with us. I can hardly believe he'll let us go; he wouldn't have done before, I know."

But Tomlins was only too glad to find his children learning to dread the snare into which he had fallen.

They were rather late, and as they went up the steps to the Temperance Hall the words floated down, sung by a hundred voices, "Courage, brother, do not stumble." It was all he heard, but it

renewed his determination, and promising to return in an hour he hastened down into the street again and commenced his applications for work for the morrow.

Three, four attempts had been made without success, and losing heart he turned back towards the hall. Rain had commenced to fall, mingled with snow; it was cold and raw, and Tomlins was but poorly clad.

He looked round for shelter, but none was in sight, and he leaned up against the wall and watched the people hurry by.

Just opposite shone the lamp of the Blue Cow, and the doors swinging to and fro let gleams of brightness and sounds of mirth escape.

Why not go over there for the few minutes he had to wait? He would not stay. Oh, no, for that would disappoint his just recovered darlings; but he could warm himself and have a word with one or two old friends who were certain to be there at this hour. He could have too—and the old thirst grew strong upon him—one glass, only one, of something to cheer and warm him. Was he not a fool to stand thus—cold, wet, and uncomfortable—when he might be warm and dry and happy? Ah, but had he not *resolved* and re-resolved never so to throw away his money and time again many and many a time? But when were resolutions made in man's own strength proof against such temptations.

A quick step over the road, his hand was on the door, when there interposed between him and ruin a friendly voice exclaiming, "Tomlins, you here!" and then a hearty handshake brought him face to face with Brown.

He would rather have seen anyone, but could not resist the hearty way in which Brown took possession of him, drawing his arm within his own and walking on towards home.

"Stay," he said, however, presently; "my young 'uns are at the Hall there at a meeting, and I've got to call for them. Time must be nearly up."

Brown looked at his watch, "Mine are there too; they'll not be out for a quarter of an hour yet. We'll just go an' have a look at our new public, if you've no objection."

It was on Tomlins's lips to speak of his resolve, but had not Brown seen him in the very act of entering the Blue Cow, and would he be likely to believe him?

So he followed as Brown led him into a large well-lighted room where ten or twenty men sat reading newspapers, books, and periodicals.

Through this was a still larger room, and here were gathered sixty or seventy of the rougher class of men, some playing draughts, some drinking coffee, some chatting, all sociable and all sober.

Brown ordered two cups of coffee, and as they sat at a small table enjoying the warmth and fragrance he explained to his wondering comrade that this was a British Workman public-house, where, free

from all temptation to drink, a man might meet with his friends, or read, or write, or amuse himself as he would.

"But how can it pay? This won't do it," touching the coffee.

"No, but it helps, and then outsiders help, and the committee and the men themselves, some of them like to help."

"It's a sort of club, is it, and you each pay something?"

"No, not at all. It's as free to you as to any one of us; any man that likes may come in and read his paper and go out again, and none'll ask if he's paid anything. There's a box by the door, if he wants to give something he can do so, but he'll never be asked, and the oftener he comes the better they like it."

"Well, but, Brown, you weren't a teetotaller I think before——"

He hesitated, for this was the first reference to that fierce attack.

"No, I wasn't. That bit of damage you did me was about the best thing that's happened this good while. It gave me time to think and see what a fool I'd been, wasting the money that ought to have kept my wife and family, and had a bit laid by to keep them on instead of their having to go to the house as they had. However, I made up my mind it shouldn't be so no more and by God's help it never shall."

"I made the same resolve, neighbour; but it would have come to grief if you hadn't just come in time, I might for aught I know have had to be carried home drunk; it wouldn't have been the first time."

"Well, we must go to our bairns; they'll have had a fine time of it. There's a magic lantern, they told me, and I don't know what."

As they walked together to the hall Brown imparted to his friend the secret of his success in shunning temptation. Need we say what it was? Trust in a stronger arm than his own, prayer to a willing Hearer, faith in a loving Redeemer had wrought the change. Few and unpolished were the words in which he told his friend of the great difference that had come to pass, but they sank deep into the mind of Tomlins. Among others at the close of the meeting he signed the temperance pledge.

And that night he knelt with his children as they uttered their simple prayer, and his longing heart went out with fervent desire as they prayed, "Lead us not into temptation, but deliver us from evil; for Thine is the Kingdom, the power, and the glory, for ever and ever. Amen."

WALTER'S GARDEN.



H! mamma, and Willie, and Florrie, and everybody, do come and look at my garden! It's just splendid now," said Walter Evans, as he put the finishing touches to the flower-bed which his father had given him a few weeks before as his own private property.

In answer to his call, Willie and Florrie scampered across the lawn at such a rate that they were unable to stop them-

selves; and had it not been for Walter's catching hold of one with each hand as they rushed past him, it is very likely his garden might have been a little *less splendid* by the time his mamma arrived to look at it.

"Oh, Walter, Walter!" they both exclaimed in a breath, "it's really beautiful!"

"And I'm jolly glad too!" said Willie. "I guess I'll make old Charlie Wilson sing small when I bring him to look at it. He said *he* could beat everybody for miles round with *his* garden, and it is not fit to be looked at in the same day with yours. Heigho! three cheers for Walter Evans, head gardener to his Grace the master of Lawnbrook House!" and he began at once throwing his cap above his head, and shouting like a young bull of Bashan.

Just then Florrie spied her mamma coming along the walk, and ran off to meet her, saying—

"Oh, mamma, do be quick! Walter's garden is splendid!"

As she neared the boys, Willie ceased his shouting, and Walter's face flushed with pleasure as he saw the look of mingled surprise and gratification with which his mother beheld his handiwork.

"Well done, Walter," she said; "it reflects great credit on you, my boy. How pleased papa will be!"

And if one can judge by the expression on that gentleman's face upon reaching that portion of his grounds where his boy's garden lay (whither he had been literally dragged by the two younger members of his family the moment that he entered the gate), he certainly *was* pleased.

"Capital!" he said. "Now you have *got* it in first-rate order, the thing is to *keep* it so, or all your time and trouble will be wasted."

"Oh, but I don't intend to be so foolish as that," said Walter; "I am going to spend three or four hours a day on it at least. I shall get up every morning at five o'clock, and have two good hours at it before breakfast; and then after I have finished my lessons of an evening I can have another hour or two instead of playing, and——"

"Stop, stop, my boy," said Mrs. Evans; "don't talk so fast. Good resolutions are all very well, but unless they are carried out they are not worth a penny a bushel."

"Well, papa," Walter said, "you will see that *mine* will be carried out."

"All right, my boy I hope they will," said Mr. Evans, as they entered the dining-room together, where Mrs. Evans and the son were awaiting their arrival.

Walter Evans was a bright, clever boy, with as honest a face as one would see in any day's journey. He was just fourteen years of age, and had carried off more prizes at school than any other boy for several terms; he was a general favourite among the boys, both in and out of school. But his father and mother had many an anxious

talk about him, for they feared that he had no constancy and firmness to tread amidst the many snares and everywhere are set to entrap the young, the path by which the noble and good men who ever lived have commenced the ascent, leading to all that is bright, and noble, and true. For a fortnight all went on swimmingly; Walter was up with the lark and working till bedtime at his garden; and it looked more lovely every day. But one day when he came home from school he greeted his mother with the words: "Oh, mamma! what do you think? The boys at the Grammar School have challenged our fellows to a cricket-match—they are the best players in town, and always beat; but I guess they won't beat us, for the boys have made me captain, and we are going to play every night till the 24th, when the match is to come off."

"And how about your garden, Walter?" said his mother.

"Oh, I've thought that over, and intend making it up in the mornings, and you know I have it in such capital order that it will easily do for two or three weeks, with less time spent on it," he said, rather impatiently.

And so for the next three weeks Walter was off to cricket as soon as ever he had finished his lessons. At first, he managed to get up a little earlier in the morning, but gradually he was later and later every morning in making his appearance, pleading that he was so tired with the cricket. "But then it will soon be over and then I'll make up for it."

The 24th came, the match was played, the collegiate (Walter's) boys won the game. But their rejoicings were less boisterous than they would otherwise have been, for just as the game was finished, Walter Evans managed to hurt his foot very badly, and a report was even circulated that he had broken his leg; he was sent home in a cab. The Doctor was called in and pronounced it a very bad sprain. But, whatever it was, it kept Walter home for a fortnight, besides giving him dreadful pain. The first time he was able to limp out, supported by his mamma, he asked to go and look at his garden. But what a sight. "Oh, mamma, I never thought it *could* get so bad as *that*! How I wish I had never bothered with the cricket!" and poor Walter blinked his eyes very hard, and blew his nose very loudly, but of course he didn't cry.

His mother led him gently back to the house, where for some time he sat with his head on his hand thinking; but he was aroused by feeling his mother's hand on his shoulder.

"Walter, my boy."

"Yes, mamma."

"Do you know that garden has reminded me of another one?"

He looked up inquiringly, and she went on:

"Yes, Walter, that garden reminds me of one which has been given to each of us by a kind and loving Father; but to keep it in good order we must work at it early and late. Do you understand me?"

"Scarcely, mamma."

"Well, then, I mean *the garden of the heart*." Poor Walter's head went down in an instant, alas! he knew that in this respect he was a thousandfold more guilty *than* the other.

His mother continued—

"You remember, my boy, one Sabbath evening last winter when you told me that God had given you a new heart, and that you intended to live a new life."

"Yes, mamma, I remember it all."

"And you remember, too, what I said to you that same evening when you wished me good night."

With half-choked utterance the boy stammered out, "*Watch and pray, lest ye enter into temptation.*"

By the time he had finished the words Walter was on his knees with his head buried in his mother's lap, crying, "God be merciful to me a sinner."

Softly his mother murmured the words :

"If we confess our sins, He is faithful and just to forgive us our sins, and to cleanse us from all unrighteousness."

For half an hour the boy and his mother wept and prayed together. At the end of that time Walter looked up, and with tearful eyes but joyous face ; and repeated the lines—

"My God is reconciled,
His pardoning voice I hear ;
He owns me for His child,
I can no longer fear ;
With confidence I now draw nigh,
And Father, Abba Father, cry."

And again they knelt together at the footstool of mercy, and thanked God that once more the boy's feet were set upon "The Rock of Ages."

As they rose from their knees Walter said, "I see it all now, mamma dear, I forgot to 'watch and pray,' and so I fell into temptation. But, by God's help, I mean to stand fast now."

"God help you, and grant you strength, my boy," said Mrs. Evans, as she kissed her son ; but there is another thing you must not forget, and that is, that we are commanded to *work* as well as to watch and pray. Remember, that although 'God for Christ's sake pardons our sins,' yet we are commanded to 'work out our own salvation with fear and trembling.' Our hearts are just like your garden, however fair and beautiful they may be when Christ has washed them in His own precious blood, if we just *leave them alone* they will soon become vile and corrupt."

It is now many years since these events transpired. The mother has long since gone to "reap her reward in glory," and the boy is no longer a boy, but a useful member of, and ornament to, society. He has never forgotten his mother's advice, and, taking for

his motto the words, *Work, Watch, Pray*, he is still fighting the good fight of faith, and hopes through the grace of God ere long to "lay hold on Eternal Life."

"A word spoken in due season, how good is it!"

MARAH.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

AUGUST.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
SECOND QUARTER.		
4 Jericho taken	Joshua vi. 6—20	Heb. xi. 30.
11 Achan's Sin.....	Joshua vii. 6—26.....	Eccl. ix. 18.
18 Ebal and Gerizim	Deu. xxvii. 1-8; Jos. viii.	Jer. xxi. 8.
25 Caleb's Inheritance.....	Josh. xiv. 6-15 [30-35]	Ps. xlvii. 4.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
4 The Draught of Fishes ...	Luke v. 1—11.....	ver. 5.
11 The Centurion's Faith	Luke vii. 1—10.....	ver. 9.
18 The Widow of Nain	Luke vii. 11—23.....	Eph. ii. 1.
25 The Friend of Sinners....	Luke vii. 36—50.....	xv. 2.

SEPTEMBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
1 The Land Divided	Joshua xviii. 1—10 ...	Prov. xvi. 33.
8 The Cities of Refuge	Joshua xx.....	Heb. vi. 18.
15 The Altar of Witness.....	Joshua xxii. 11—29...	Ps. cxlv. 4.
22 Joshua's Warning	Joshua xxiii.....	ver. 11.
29 God's Mercies to Israel ...	Joshua xxiv. 1—18 ...	Deut. viii. 2.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
1 Mission of the Seventy ...	Luke x. 1—9, 17—24	ver. 9.
8 The Good Samaritan	Luke x. 25—37.....	Gal. v. 14.
15 Importunity in Prayer ...	Luke xi. 1—13.....	xviii. 1.
22 Warning against Covetousness]	Luke xii. 13—30	ver. 15.
29 Review of the Quarter's Lessons		

BIBLE QUESTIONS.

1. A celebrated mountain in Samaria.
2. A name by which the Lord is sometimes known.
3. An image worshipped by idolators in olden time.
4. A faithful companion of an Apostle.
5. The dwelling place of a celebrated giant.
6. A city where Paul was imprisoned.
7. A king of Judah.
8. A river by whose banks a prophet saw many of his visions.
9. The son of a king of Israel.

The initials give a boon bestowed by God. The finals name what is deceitful.

JUVENILE MISSIONARY MEETINGS.

VENTNOR STREET, LEEDS.

DEAR SIR,—We held our annual Juvenile Missionary meeting on Sunday afternoon, April 28th. The attendance was good. The chair was taken by our esteemed friend Mr. J. Spence, of Armley, who in an interesting little speech congratulated the friends on the progress they had made since he was associated with them as a fellow worker. Encouraging addresses were given by Messrs. S. Wildblood, G. H. Hampshire, J. P. Toad, and John Parker. The children rendered excellent service in singing and reciting. The report read by the secretary showed that much earnest work had been done during the year, the result of which was most gratifying and cheering. The following sums have been raised:—

	£	s.	d.		£	s.	d.
In the several classes of the school ...	1	16	0	Circuit meeting, held in Woodhouse-lane Chapel, Nov. 28th, proceeds of which are equally divided among the several schools.—			
Boxes taken by friends	1	1	4	Our share ...	1	2	0
Collected by the children—				Collection at the meeting	1	10	0
Charles H. Dixon ...	2	6		Balance in hand ...		14	6
A. Wade ...	4	6					
W. E. Whiteley ...	10	0		Total ...	£12	13	10
Miss M. B. Whiteley	12	0					
Miss E. E. Crowther	14	0					
Miss F. Walker ...	2	1	6½				
Miss E. Tinker ...	2	9	1½				

This is more than double what we got last year.

G. EARNshaw, Sec.

SHERIFF'S HILL, GATESHEAD.

On April 7th the Juvenile Missionary Society held their annual meeting. Mr. A. Stratton presided. The secretary read the report, and the following list of collections for the present year by the scholars:—Charles Spedding, 6s. 6d.; J. S. Charlton, 5s. 8d.; M. A. Bradshaw, 5s. 6d.; A. Stratton, 3s. 7d.; G. Stephenson, 2s. 6d.; T. Snowdon, 2s.;

J. Snowdon, 2s.; J. Punshon, 1s. 9d.; B. Miller, 1s. 7d.; M. Cook, 1s. 6d.; W. Punshon, 1s. 4d.; J. Drummond, 1s. 4d.; Rebecca Craigs, 1s.; J. Patterson, 1s.; Small sums, 1s. 7d.; making with the collections £2 6s., being 3s. 4d. in advance of last year. The scholars sung suitable hymns, repeated poetry, &c. The meeting was also addressed by Messrs. Scott and Snowdon. We hope and pray for greater things yet.—A. S.

LEEDS (WOODHOUSE LANE).—The annual sermons in connection with Woodhouse Lane Juvenile Missionary Society were preached on Sunday, May 19th, 1878, by Rev. J. H. Chamberlin. Collections, £9 19s. 3d. In the afternoon the thirty-third Juvenile Missionary Meeting was held in the chapel. Our esteemed friend Mr. C. D. Wainman presided, and gave us a very interesting address. The secretary read the report and financial statement for the past year, which amounted to £28 0s. 1d. Mr. H. Nettleton, in a short and practical address, moved a vote of thanks to the collectors, and Mr. J. Parker seconded the resolution. The chairman then called upon Mr. J. Thornton to address the meeting. Afterwards Mr. G. Huntley moved a vote of thanks to the retiring committee, which was seconded by the Rev. J. H. Chamberlin. After the collection, which amounted to £4 3s. 6d., Mr. W. Wildblood moved, and Mr. J. Thornton seconded, a vote of thanks to the chairman. Special hymns, printed for the occasion, were sung very well by the scholars. The amounts collected are as follow:—Cards and books—William Walker, £5; John W. Gray, £1 15s. 8d.; James E. Ward, £1 14s.; Mary Ann Smith, £1 11s. 8d.; Arthur E. Braithwaite, £1 7s. 6d.; Samuel Procter, 15s. 6d.; Robert True, 15s.; Frank Fox, 4s. 1d.; George Holden, 3s. 6d.; Henry Flowith, 3s. 3d.; William Buckle, 3s.; Alfred Johnstone, 3s.; Tim Thompson, 2s. 3d.; Robert Flowith, 2s. 5d.; Small sums, 2s. 9d.—£14 3s. 7d. Total:—(Subscriptions, £4 19s.; Boxes in school, £5 2s. 6d.; Cards and books, £14 3s. 7d.; Rev. F. Jewell's lecture, £2 6s.; Proportion of Circuit meeting, £1 2s.; Collections, sermons, £9 19s. 3d.; Collections, meeting, £4 3s. 6d.)—£42 2s. 10d. Less expenses (£1 7s. 6d.) £40 15s. 4d.—J. W. Dixon, Secretary.

Dear Mr. Editor,—The foregoing report has been furnished by our esteemed friend Mr. John William Dixon, with whose communications during your editorship will have become familiar. Mr. Dixon very modestly omits all reference to himself, but the chief feature of the meeting was the presentation of a gold pen and pencil-case to him on the occasion of his completing twenty-one years' services as secretary of the Juvenile Missionary Society. From a knowledge of Mr. Dixon's services, derived during the time of your sojourn in Leeds and subsequently, you, Sir, will feel that no tribute could have been more worthily bestowed. The presentation was made in most appropriate terms by Mr. Thornton.—I remain, dear Mr. Editor, yours faithfully, W. W.

[To receive this communication gives us much pleasure. It recalls much which still lives in our memory. From personal knowledge we can bear testimony to Mr. Dixon's admirable qualities as Mission secretary. Our friends have honoured themselves in their practical expression of esteem for him. We are happy to see that the report says nothing of his retirement from office.—EDITOR.]

DUNSTON-ON-TYNE.—On Sunday evening, April 28th, we held our annual Juvenile Missionary Meeting, which was presided over by Mr. Andrew Hopper. Addresses were delivered by Messrs. William Wright,

Robert Winship, and the writer. The following pieces of poetry were recited by the children:—"Stand up for Jesus"—J. W. Bainbridge; "Mission Work"—Elizabeth S. Blenkinsop; "Work and Wait"—John Dinning; "Lend a helping hand, my brother"—Grace A. Hopper; "Here am I, send me"—Andrew Forster; "Home"—Eleanor Smith; "What I can do"—Elizabeth M. Marshall. During the evening the choir rendered very appropriate pieces of music, conducted by Mr. Joseph Blenkinsop, and accompanied on the harmonium by Mr. William W. Ferguson. A collection was made at the close, which amounted to £1 3s which was, considering the great depression of trade in the neighbourhood, very good. Altogether it was one of the most interesting and profitable meetings of the kind we have ever had. I may say that all who took part in this effort were our Sunday-school teachers and scholars. One face, however, was missing at this meeting, one who for many years took an active part in them, and who was the originator of these meetings in this place, and that was our beloved Sunday-school superintendent. John Blenkinsop died at Mentone, France, where he had gone for the restoration of his health, February 8th, 1878, aged forty-two years. "The memory of the just is blessed."—THOMAS TAYLOR, Secretary.

Poetry.



LIFE.

LIFE is a warfare—fight, and victory gain;
 Life is a race—run that thou mayest obtain;
 Life is a voyage—launch thy bark with care,
 Lest 'mid the raging billows thou suffer shipwreck there.

This world's a school. Oh, learn the lessons right
 Which God Himself would teach! Work with thy might:
 Life's day is short, its golden moments fly;
 Improve the passing hour, for death is drawing nigh.

Life's but a pilgrimage. Heaven is the home
 Toward which our eyes should turn, our feet should come;
 There dwells our Father, God; there saints and angels meet;
 And many fellow pilgrims now do walk the golden street.

Theirs is a higher, holier life; but how may we attain?
 Christ is the Way, the Truth, the Life; through Him we Heaven shall gain.

Be faithful, then, and battle on, though sin and death be rife,
 Be faithful even unto death—thou'lt have a crown of life.

Guernsey.

MILLIE.



SUMMER RECREATIONS.

SUMMER RECREATIONS.



Tis an ordinance of Heaven that by the sweat of his face man shall earn his bread. We can get our various wants supplied only by industry and toil. The teachings of the Book of Proverbs are true in the present day. Want comes as an armed man to him who is lazy. Idleness clothes a man with rags. He becomes poor that dealeth with a slack hand, but the hand of the diligent makes rich. We therefore hope that all our young readers, whether they are at school or have gone to business, will cultivate habits of industry.

But there is another side to the question. All work and no play will make Jack a dull boy. We may over-strain our powers both of body and mind. Those who work hard therefore must have their times of relaxation. This is so generally admitted that summer time has become with us, more or less, a time of holiday-making. Those who live in towns, if they can, get into the country, to breathe fresh air and feast their eyes on beautiful scenery; these are the persons who can truly estimate the delights of summer.

A dreamy sound of waters, falling, ever falling;
Voices of sweet song-birds, to each other calling;
Flowers all rainbow-tinted, springing, ever springing;
On the vagrant breezes richest perfume flinging.

A perfect satisfaction, a fulness of delight,
A sense of gliding onward through regions ever bright;
All balm, all bloom, all beauty, like some ambrosial clime,
These are the signs that tell us of glorious summer time.

We hope that all our readers have had a "glorious summer time" in the season that is now closing. We hope they have had much enjoyment in their rambles in the lanes or by the sea-shore, in their rides on the railway or their sails in the steamer. Or, if they have had to be keepers at home instead of ramblers abroad, we hope they have enjoyed their cricketing and other athletic games in which they have taken part. All these exercises we trust have been truly recreations to them; and now, with strength and spirits renewed, they are ready to buckle to their serious work again, whether it be in the school, or the merchant's office, or the artizan's workshop. For the working season on which we are entering let us all take this for our motto:—
"WHATSOEVER THY HAND FINDS TO DO, DO IT WITH THY MIGHT."

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of "A Year at School," &c., &c.*

Letter No. 129.

From MRS. BARLOW to BEN BARLOW.

4, Sea View Terrace, Weston-super-Mare,
August 14th, 187—.

MY DEAR BEN,—

You see we have safely arrived here. We got here about five o'clock on Friday afternoon, and Mr. and Mrs. Instone came in by the London express about an hour later. Of course your father came with us. He stayed until this morning, when he returned to look after his Woodbourne patients. Mr. Instone returns to London to-morrow.

Ernie was very tired by the long railway ride, but a night's rest put him right again, and he is already better than he has been since we had him in charge. He was so young when he was at a watering place before that he remembers nothing of it; and the sea, the boats, and everything else have a wonderful charm and interest for him. Mr. Instone has engaged a stout, civil young man to bring his Bath chair every day, and take Ernie wherever he wishes to go on the beach. Of course we shall take charge of him when we drive out.

I think I shall like Weston very much. Its beach is beautiful, and we have a grand esplanade, a pier, and a number of public buildings. Besides the sea view, there is some beautifully-wooded country round, which will be delightful for walks or drives.

I need scarcely say that Clara and Helen are delighted. They were out on Saturday with their spades and buckets for several hours, and after seeing your father off by the train they went out again this morning. Clara says she wishes you were with them, for she knows you would take them out for a row in a little boat. But I tell her, however well you may manage a boat on fresh water, I should hardly like you to risk your lives on the sea, for the waves here are very rough at times.

The servant has just brought in the tea-tray, so I must conclude. We all send love, both to you and to your friend Ted. (I expect he will get a letter by this post. His Ma has been busy with her pen for some time.)—Your affectionate

MOTHER.

Letter No. 130.

From BEN BARLOW to MRS. BARLOW.

Waterside House, Worcester,
August 18th, 187—.

MY DEAR MOTHER,—

Thank you for your interesting letter. I wish I were with

you. I shouldn't be afraid to manage a boat on the sea after a little practice with a sailor. I am glad Ernie is so well. I suppose the man who wheels him about is hardly such a favourite with him as our dear old Bob.

Ted got a long letter from his Ma as you expected. She consoles him for his not sharing the trip by the promise that if Ernie only continues to improve as much as he has done of late, they shall pay a visit to the seaside every summer in future, and they will so arrange that Ted can pass at least a week or ten days of his holidays with them there. May I suggest that you should consider a similar proposal?

We held our second Band of Hope meeting last night, and got quite a good company. We had temperance songs and recitations, a speech from Mr. Macpherson, and a very short address from Ted. Five more fellows signed the pledge.

With love to you all (in which Ted joins), I am your affectionate son,

BEN.

Letter No. 131.

FROM DR. BARLOW TO BEN BARLOW.

High Street, Woodbourne,
August 29th, 187—.

DEAR BEN,—

I have some astounding news for you. I think we told you how great an interest Mr. Instone took in our Bob when he saw him here. It has not been without result. But I must tell you these things in order.

The last time but one that Mr. Instone came he asked me what I knew of Bob's origin. Of course it was very little that I could tell. However he took exact notes of every little fact. When he came here to arrange for the seaside trip he interrogated me again. He said he should like to see the matron who nursed Bob's mother in her last hours, he had a few questions to put to her. Fortunately I knew her address. I had used my influence to get her the post of matron in a London charity. He said he would call and see her.

I expected he was going to Weston on Saturday last to stay until the return of Mrs. Instone. Imagine my surprise when he walked into my surgery. But my surprise at seeing him was nothing to my astonishment at the news he brought.

He had found out Mrs. Webster, the former matron at Upligh Union. Had learned from her that some of Bob's mother's linen was marked with the initials "L. A. L." in a monogram. Had even got the fragments containing the marks, which Mrs. Webster had cut out and prudently preserved, together with a portrait locket, in the hope that some day they might be of service to the boy born under such strange circumstances.

The reason for his curiosity is this. Mr. Instone has for years

been trustee of a moderate-sized estate near London, which he is now perfectly certain belongs to our Bob! It seems the property belonged to a Colonel Leslie, who, having retired from the army; lived on it as a gentleman farmer, with his only daughter, Lilian Adelaide. She became acquainted with Robert Audsley, a young man engaged in his father's office in the City. The attachment was mutually strong. But the Colonel was proud, and would not consent to his daughter marrying a man he considered beneath her. In an evil moment Miss Leslie was persuaded by her lover to elope, and they were married by special licence at Greenwich.

They had hoped the Colonel would relent when he saw his opposition was in vain. On the contrary, he refused to see or communicate with either his daughter or her husband. For a few months the young couple were as happy as they could be under the shadow their selfish disobedience had thrown over them. Before long, however, disaster befel them. Mr. Audsley's business failed, and his son had to look out for some means of getting a living for himself and his young wife. He got a situation in Birmingham, but the anxiety he had gone through, acting on an originally delicate constitution, brought on fever, and he was buried there. His poor wife tried for a time to earn her living by needlework, but her health failed, and she at last decided to return home, cast herself at her father's door, and ask for pity there. She, however, only got as far as Upleigh, where she died in the Union after giving birth to the boy we call "Bob."

Colonel Leslie heard of the failure of the Audsleys, and after a long struggle between offended pride and parental tenderness he resolved to take his daughter again to his heart and home, and make the best of her husband who, he was forced to admit, was a gentleman of good education and abilities. But while the struggle was being decided time was lost, and when his love rose above all other considerations he found to his dismay that he could not trace his wilful child. He advertised in London and provincial papers, but without success. He could hear nothing of the daughter he loved so passionately.

Some years afterwards he engaged Mr. Instone's professional assistance, and he traced Bob's mother to Birmingham, and ascertained the fact of her husband's death. Beyond that he could get no clue. The Colonel, however, executed a will, leaving all his property on trust to his daughter, or to her heirs if any should be found, and finally died broken-hearted twelve years ago, without ever hearing anything more about his lost child.

Mr. Instone is quite satisfied; Bob is the son of Robert Audsley. The locket his mother wore contains portraits which correspond with authentic ones of Colonel Leslie and Robert Audsley. He has already commenced the necessary legal steps to ensure the transfer of the estate to Bob.

Of course Bob is astounded at the news, but directly he had

heard all we had to say he went and groomed my horse as if it were all a dream. I tell him I must get another hostler, and he must set about and make up for his defective education. He only laughs, and says he shall never be happier than he has been here, but of course that is nonsense. He has made very great progress at the night school during the last nine months, and he can write and figure very fairly. I must get Mr. Jones to give him a bit of polish now he is a landed proprietor. I shall of course lose a trusty servant, but I am as glad for Bob's sake as if his good fortune were my own. But, bless my life, what a long letter I have written! Let me finish up short.

With love, your affectionate father,

OLIVER BARLOW.

Letter No. 132.

From BEN BARLOW to "BOB."

Waterside House, Worcester,

September 2nd, 187—.

DEAR OLD BOB,—

I can't tell you how pleased I am at your good fortune. I got news of it on Wednesday, and this is really the first chance I have had of writing to congratulate you.

I suppose you have hardly made up your mind as to where you will live and how you will do. Of course you will leave our house. That is certain. I couldn't think of letting you black my boots or run errands for me now, though I should like you to stop with us as a companion. I don't like to think of coming home and finding you not there, and I try not to think how much the horse, and the dog, and my rabbits and pigeons will miss you. But perhaps you'll let me come and see you at your place sometimes, and as you are sure to keep a good horse in the stable we can drive out together.

I hope you will do as father advises—have regular lessons from Mr. Jones, and try to make up for lost time. Ted Instone has just been talking to me about you, and he says that is all you want to fit you for your new position. He says you look more of a gentleman than many an aristocrat. I know I could never make out what made you so different from other grooms. I am sure you are as good-hearted as any nobleman. But I need not praise you up now; it looks like flattery. You know my opinion of you of old.

With kind regards, I remain yours truly,

BEN BARLOW.

Letter No. 133.

From ERNIE INSTONE to BEN BARLOW.

Western-supper-Mare,

Sept. 4, 187—.

DEAR MASTER BARLOW,—

I am ashamed to think I have bene hear nearly three weekes,

and haven't wons writn to you. But I have had to writ to Pa and Ted, and thear has bene so much to do and to see that I seeme not to have any leasure. And I shouldn't find time now, praps, only it has begun to rain and we can't go out.

Aren't you pleased about Bob? I'm so glad my Pa has got the land for him, becaus he has bene so real good to me.

I have got a man hear to weel me about. He is very good, and finds shels and pebbels for me and talks to me for hours. He makes beautifile little, boats too. He cuts them out offbits of wood with his pocket-nife. And then he swims them in little pools left by the tied. I like him very well, but not so well as Bob after all.

I am geting a deal better, and can allmost walk my self. Your Papa now says I am to stop hear anuther weeke or two if the wethur keeps warm. Then I am to go to Woodburn agen for about a month befoar I go back home to London.

It has cleered up now, and I am going to the beech with your sisters and Jerry—that's the man that weels me about—so with love to you and Ted. I remane, yours truely,

ERNIE INSTONE.

Letter No. 134.

From "BOB" to BEN BARLOW.

Woodbourne,

Sept. 9, 187—.

DEAR MASTER BEN,—

Your last letter made me feel very quear. If the money my poor mother died for the want of is to part me from everybody I am fond of, I shall wish I had never heard of it. I was very contented before, and didn't want any fortune better than sound limbs and a good conscience.

Your father is determined I shall do stable work no longer, and he has got a young fellow to see to his horse; but if I didn't give him a extra rub unbeknown to your father, the old cob would be turned out in a very rough fashion.

I am having lessons twice a day from Mr. Jones, and I get on pretty well, so I think; but you know I was always conceited of my learning. They want me to leave off playing the drum, but as long I stop in Woodbourne I shall continue in the band.

Your mother and sisters and Master Ernie were to have come back from the seaside to-day, but when your father went down last week he found the change was doing the lad so much good that he thought it better for them to remain a week or two longer.

I shall be glad to see them all back. It isn't like the same house without them. I miss Master Ernie espeshly, he is such an affectionet little fellow. But I hope he and your sisters, too, will treat me just the same as before they went, or I shall be very uncomfortable, I'm sure. I hope *you* at least will always write and

speak to me as if this job had never happened. With love, I remain your obedient servant,
 BOB.

P.S.—Mr. Instone says I must sign myself Robert Audsley, but I shall always be Bob to you. I went yesterday to order a memorial stone for my dear mother's grave. Poor thing! the first money I receive under my grandfather's will shall be spent in her honor.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

XX.—ENGINEERING—THE RAILWAY AND THE LOCOMOTIVE.

IN these days when railways traverse the country in every direction—when we step into a railway carriage as readily as into an omnibus, and breakfasting comfortably in London, are whisked off to Edinburgh almost in time for the fashionable dinner—it requires no little effort to realise the incredulity and contempt with which the idea of superseding the stage-coach by the steam locomotive, and having lines of iron railways instead of the common highways, was regarded for many years after the beginning of the present century. Even after the project had been proved to be practicable, and steam-engines had been seen puffing along the rails, with a train of carriages attached, even so late as the year 1825, we find one of the leading periodicals, the *Quarterly Review*, denouncing the gross exaggeration of the powers of the locomotive which its promoters were guilty of, and predicting that though it might delude for a time, it must end in the mortification of all concerned. The fact was, said the writer, that people would as soon suffer themselves to be fired off like a Congreve rocket, as trust themselves to the mercy of such a machine, going at such a rate, the rate of eighteen miles an hour. How fallible are even writers in reviews, for as our young readers know, tens of thousands have trusted themselves to the locomotive, and people nowadays, accustomed to dash along in express trains, would deem eighteen miles an hour a perfect snail-pace.

But we must at once proceed to give a brief

HISTORY OF THE RAILWAY.

The "railway" had the start of the locomotive by a couple of centuries, and derives its parentage from the clumsy wooden way-leaves or tram-roads which were laid down to lessen the labour of dragging the coal waggons to and fro from the place of shipment in the Newcastle collieries. These were in use from the beginning of the seventeenth century, but it was not till the beginning of the nineteenth that the locomotive steam-engine made its appearance. The

first practical idea of applying steam-power to wheeled carriages is due to Dr. Robinson, by whom it was communicated to Watt in 1759. Some time afterwards the latter made a model of a high-pressure locomotive, and described its principle in his fourth patent in the year 1784, which, among certain improvements, specified "a portable steam-engine, and machinery for moving wheel-carriages."

Nothing, however, came of it, and the honour of having first proved the practicability of applying steam to the purposes of locomotion is due to a Cornishman named Trevithick, who devised a high-pressure engine of very ingenious construction, and actually set it to work on one of the roads in South Wales, where it drew a load of ten tons at the rate of five miles an hour. Slight ridges were left in the edge of the wheels and on the trams, to prevent their slipping round, and to ensure a forward movement. That without this precaution there could be no adhesion or advance was an idea that long prevailed. Trevithick, who was a man of great ability, afterwards made a carriage to run on common roads which combined several of the arrangements now in use. This engine was exhibited on one of the roads in Lambeth in 1806, without, however, exciting more than a temporary interest. In 1812 Blenkinsop's engine worked at Leeds, drawing thirty-three coal waggons at the rate of three and three-quarter miles per hour. In this the wheels were cogged and ran on toothed rails; a noisy contrivance, intended to overcome the imaginary difficulty—want of bite—but effectually preventing rapid motion by its enormous friction. The engine had two cylinders, and so far was an improvement on those which preceded it. Brunton followed in 1813 with mechanical legs and feet attached to the rear of his engine, intended by their alternate walking motion to propel it continually onwards, and prevent the slipping of the wheels on the rails. Considerable ingenuity was displayed in this contrivance, which performed well, and in certain cases might be employed with advantage, but was not well adapted to locomotive propulsion. The difficulty against which it was especially applied was soon proved to have no existence. During the same year Blackett repeated Trevithick's experiments at Wylam, in Northumberland; and the fact was satisfactorily demonstrated that, in ordinary circumstances, and with clean rails, the adhesion between the wheel and the rail was sufficient to cause a progressive motion. It would have been proved long before had the engines and tram-plates been heavier; both were too light; and the slipping so much complained of had been accidental, not a necessary consequence.

For George Stephenson it was reserved to bring about the alliance of the locomotive and the railroad—"man and wife," as he used to call them—whose union, like that of heaven and earth in the old mythology, was to bear an offspring of Titanic might—the modern railway. In 1814 he verified the experiments of other inventors, and went beyond them all in the perfection and performance of his machinery. He took out patents in the two following years for

engines that, with a load of twenty tons, and on smooth rails, would travel five miles an hour, and ten miles without a load. No better result at that time was looked for. The possibility of transporting heavy goods with facility at a slow pace having been demonstrated, all that remained was to make it available. These locomotives were employed on the Stockton and Darlington Railway in 1826 for coal transport, in addition to the horses. It was no uncommon sight to see one of these engines drawing behind it a train of loaded waggons, weighing ninety-two tons, at the rate of five miles an hour. In those days steam whistles had not yet come into use ; and the firemen, to give notice of their approach after night-fall, threw up high into the air, from time to time, a shovelful of red-hot cinders, which could be seen at a considerable distance by those moving in the opposite direction. Without a load the speed of the engines was not unfrequently fifteen miles an hour—a most exhilarating rate of travelling which at that period was regarded as little less than marvellous.

The success of the Darlington line induced the Liverpool merchants to project a line between that town and Manchester ; and George Stephenson was almost unanimously chosen as engineer, though it was still undetermined whether the new line should be worked by steam or horse power. But, apart from that question, a great, and, as it appeared to most of the engineers of the time, an insurmountable difficulty existed in the quagmire of Chat Moss—an enormous mass of watery pulp, which rose in height in wet and sank in dry weather like a sponge, and over whose treacherous depths it was pronounced impossible to form a firm road. It was perfect madness to think of such a thing, said the engineers, and none of them would support Stephenson's scheme ; but he resolved to see what could be done. Truck-load after truck-load of stuff was emptied into the moss, and still the insatiable bog kept gaping as though it had not had half a feed. The directors, alarmed, would have abandoned the project, had they not been so deeply involved that they were obliged to let Stephenson continue. But he himself never doubted—not for a moment. He only pushed on the works more vigorously ; and before six months were over, the directors found themselves whirling along over the very bog they expected all their capital was to be fruitlessly sunk at the bottom of. Still, no decision had been come to as to whether locomotive or fixed engines were to be adopted, and the Stephensons, father and son, were still battling bravely in favour of the locomotive against a host of opponents. The son, Robert, did his father good service by the able and pithy pamphlets which he wrote on the subject ; and at length their perseverance was rewarded by the directors consenting to employ a locomotive, if they could get one that would run at the rate of ten miles an hour, and not weigh more than six tons, including tender ; and offering a reward of £500 for the best engine fulfilling these conditions. The 8th of October, 1829, was fixed for the trial, and on the appointed day three engines were brought forward to compete for the prize—a

competition which involved much more than the winning of £500. Stephenson was there with his *Rocket*, Hackworth with the *Sanspareil*, and Braithwaite and Ericsson with the *Novelty*. The test assigned was to run a distance of thirty miles at not less than ten miles an hour, backwards and forwards along a two-mile level near Rainhill, with a load three times the weight of the engine. The *Novelty*, after running twice along the level, was disabled by failure of the boiler-plates, and withdrawn. The *Sanspareil* traversed eight times at a speed of nearly fifteen miles an hour, when it was stopped by derangement of the machinery. The *Rocket* was the only one to stand the test and satisfy the conditions. This engine travelled over the stipulated thirty miles in two hours and seven minutes nearly, with a speed at times of twenty-nine miles an hour, and at the slowest nearly twelve; in the latter case exceeding the advertised maximum, in the former tripling it. The *Rocket* triumphantly carried off the prize, and by its success established the practicability of the locomotive beyond a doubt; from that day forward public opinion began to turn. Of course, for many a long year afterwards there were not wanting numbers of bigoted men of the old school, who cried down the new-fangled system, and would hear of no means of transit but the stage-coach and the canal-boat. But such bigots became few in number as time rolled on, and within ten years of the day when the *Rocket* went puffing triumphantly along the Liverpool and Manchester line, most sensible people had become convinced of the importance of the locomotive railway, and scarcely a principal town in the country but was supplied with a line.

George and Robert Stephenson had fought a hard fight for their protégé, "rail and wheel," and now they were to reap the fruits of their enterprise and foresight. To nearly all the most important of the new lines George Stephenson acted as engineer; and thus, in the course of two years, above 321 miles of railway were constructed under his superintendence, at a cost of £11,000,000 sterling. The three great works with which the name of Stephenson will always be most intimately associated, and which are the grandest monuments of his genius, are the High Level Bridge at Newcastle, the Britannia Bridge across the Menai Straits, and the Victoria Bridge across the St. Lawrence at Montreal. The facts connected with

THE GROWTH OF RAILWAYS

are, if possible, more interesting than those associated with the railway's early history. Who can glance, without a sentiment of wonder, at the spread of the railway system in the last thirty years? The statistics connected with the matter have become almost unmanageable. According to the report of the Commissioners of Railways for 1850, the additional lines opened in that year made the total for the United Kingdom 6621 miles. Up to December, 1850, the lines authorised by Parliament comprehended 12,182 miles. The whole number of stations was 2030; the number of engines at work was

2436; the miles travelled over 40,161,850, or 110,333 per day; the tons of coke burnt, 627,528, which had been produced from 896,466 tons of coal. The grand total cost of all the railways amounted to £220,000,000. Year after year the system spread with a rapidity which we need not study in detail. Suffice it to say that the few score miles of railway planted in 1825 have put forth offshoots and branches, till now a mighty network of some ten thousand miles is spread over the three kingdoms, with many fresh shoots in bud. In 1834, when not a hundred miles of railway were open, the annual average of travellers by coach was some six millions a year. There were carried in 1864, 28 millions first-class passengers, 65 millions second-class, and 136 millions third-class, or 229 millions altogether. The passenger money received was no less than £14,000,000, the total receipts for the year being *thirty-four millions sterling*.

When George Stephenson was planning the Liverpool and Manchester Line, the directors entreated him not to talk of going at a faster rate than ten miles an hour, or he "would put a cross on the concern." The average speed is now twenty-five miles an hour, and a mile a minute can be done if need be.

It would require the pages of a whole book, and that not a very small one, to dwell on all the phases of the social revolution which the modern railway has wrought in our own and other countries; how it is daily annihilating time and space, and making the Land's End and John o' Groat's House next-door neighbours; rubbing down old prejudices and jealousies, both national and provincial; promoting commerce; developing manufacture; transforming poor villages into flourishing towns, and industrious towns into mighty cities; carrying civilisation into the heart of the jungle and the desert; and, with its twin-brother, the steam-ship, joining hands and hearts in peace and amity all the world over. After the wonders of the last thirty years, who can doubt that our children, at the close of the century, will regard us as little less backward than we now do our fathers at its dawn.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXX.—MARINE ANIMALS.—(Continued)



E must now advance to creatures of a higher organisation belonging to the kingdom that scientific men call "articulated" or jointed. Their nervous system, instead of being situated in the centre of their bodies, and branching out in all directions like those already noticed, consists of a brain from which communications are made backwards and forwards to all the limbs and other extremities.

One of the most curious creatures is the barnacle, not much bigger than a filbert, but having such a wonderful structure that the wheels and pulleys and pistons and rods and cranks of the most complicated modern machinery are all simplicity itself by the side of it. The one we will describe has something the appearance of the oak acorn, and is called the Acorn Barnacle. The little creature lives in a kind of stone house, which he never leaves, and which he fastens to the hull of a ship, or the back of a whale, or a floating piece of drift wood, or a convenient rock. Glands situated at the base of his antennæ hold a tenacious cement which, being thrown out in great abundance, fix the whole front of his head to the spot he selects as the site of his future home. This cement rapidly sets under water, and the animal henceforth becomes immovable. At the top of his house he has a pair of folding doors, which swing open on the inside, and which he opens and closes at pleasure. To obtain his food he puts out his hand, having twenty-four fingers, which spread out like a fan, and make a kind of living cast net. Woe to any minute creatures that may be moving near, sea-worm, or germ of sponge, or what else, that meets the clutch of those enclosing fingers! For this hand is a terrible weapon. It has nearly five hundred joints, each of which is worked by a separate muscle. Each joint is supplied with stiff hairs, which stand out from it, and each hair has smaller hairs, all of which are as sensitive as the whiskers of a cat. The hairs lock into each other and shut out all chance of escape; the living net is quickly drawn in when the prey is seized, and whatever object is secured soon finds itself in the maw of the barnacle.

But before the barnacle settles down for life, and gets his living in the steady and serious way indicated, he has to pass through many a surprising change. The early part of his existence is very gay and lively. The changes are as remarkable as those by which the caterpillar becomes the butterfly, only the order is reversed, and the life of careless and roving freedom is that which is first experienced. The young barnacles are observed to have a kind of shield covering their backs, and ending in a slender point with teeth on the edges. Under this shield are their bodies, having six legs without either feet or claws, but being supplied with stout hairs. With their six fringed legs they make capital swimmers, and dart about in the water as swiftly and as gaily as insects in the air. Before they fix themselves to one spot for life they pass through some curious transformations. At one time they have one eye, at another two, and then, finally, when they become settled in the home from which they remove no more, they have none, because for the kind of life they then live none are required. Who can refrain from admiring that beneficence which gives them sight when it is necessary to the safety and happiness of their roving existence, and takes it away when it could be of no possible use, but would be an element of weakness and danger in their fortified home?

Every one has heard of the famous definition of the crab submitted

by the committee appointed to compile the first French dictionary to Buffon—"a marine insect, of a red colour, that walks backward." "It is a very excellent definition," replied the great naturalist, "with the slight exceptions that the crab is not an insect, is not red, and does not walk backward." These gentlemen could never have seen a crab except as it was placed on the table ready cooked for eating. Crabs may be observed by almost anybody who will examine the pools or turn over the stones at low water, and their manœuvres are highly interesting. The rocky parts of our coasts abound with them especially, from the size of a pea to the size of a fiddle—many of the large ones caught in the South of England weighing as much as ten or twelve pounds. Their colour varies from a light yellow to a deep or dull brown, the tips of the claws being generally black. The crabs, however, of the Indian and Chinese seas are often of the most gorgeous colouring, and the size generally larger than in England. One of the most curious sorts in British waters is the "spider crab," the body of which is triangular in shape, very rough and spiny. Its legs are very long, and as it erects its body on them and runs along, it looks exactly like an overgrown and bloated spider that has swelled out its corporation by feeding on all its relatives and friends. The hermit crab is something like a crab and something like a lobster. His tail is prolonged like that of a lobster, but is short of the defensive scales with which the lobster is supplied, and which indeed his own body and claws possess. This apparent defect in his structure is supplied by an instinct which impels him to seek a suitable shell and insert in its strong chamber his unprotected part. Might is right with him, and for his own comfort he not unfrequently turns the legal occupant out of his house. He has, however, at times to endure the inconvenience that all prosperous persons experience, of leaving his narrow home as it becomes too strait for him, and seeking out a fresh shell that will correspond with his increasing bulk.

The shrimp is a lively and frolicsome fellow in his native element, presenting an appearance very different from his demure aspect when lying on the dish waiting to be eaten. Every one who has enjoyed the pleasure of "shrimping"—a very popular recreation in the South of England and the Channel Islands—must have stopped often to admire the beautiful creatures as he took them out of his net to drop them into his basket. Their bright and beautiful colour, green or yellow, their transparent scales marked by dark lines as beautifully as the rings or stripes of a tiger's coat, their long antennæ, their glistening eyes which they can project forward at pleasure, their powerful tails and active legs, make up a structure that cannot be excelled for grace and beauty. The most favourable time for shrimping is the ebb of the tide. They may not only be then caught on the margin of the sea, but they are often left behind in great numbers in the rocky pools that abound on many parts of our coast. As the shrimper warily dips his net into these pools he sees the beautiful

creatures dart forth with a grace and vivacity that must make an impression on the dullest imagination.

There are many kinds of lobsters, and all of them are extremely prolific. They flourish in the clear water on the rockbound parts of our coast. They live in holes at the bottom of the sea, and seek their prey as they crawl over the rocks, or as they move with great rapidity through the water by means of their muscular tails.

Fashion is not supposed to have much influence among the denizens of the deep, but there is no doubt that they frequently furnish themselves with what sailors call an entirely new "rig out." It is not, however, mere fastidiousness of taste that leads to this change, but the necessities of their increasing size. Imagine a growing boy of fourteen who is compelled to wear the clothes that were a good fit at seven, and you will have a faint idea of the condition a crab or lobster would be in were it not that they could cast their old shells aside and get an entirely fresh covering. The new shells grow as the old ones are cast off; for a short time they are soft, and the animals keep themselves as secluded as possible, but they soon obtain all the hardness and solidity of the rejected coat of mail.

In the tender care bestowed on these creatures we see the Divine goodness, and in the exquisite adaptation of their varied organisations to their mode of life and their surrounding circumstances, we behold the Divine wisdom—a wisdom and goodness that pervade every part of the habitable world.

DAISY BANK ;

OR, SISTER ELLEN'S MINISTRY.

By J. CAPES STORY.

CHAPTER X.—JIMMY JORTIN FOUND OUT.



It was not long before an opportunity occurred of asking Mr. Norlan about Jimmy Jortin.

"Know the lad?" said Mr. Norlan to Ellen and Richie; "I should just think I do. Why, he's one of my own picking up, if I may so say. And he was worth the finding I can tell you. When I got him into the chapel, a few Sundays since, he looked like a beggar in a palace. But says I to him one day, 'Don't be afraid, lad, but just you walk into the place as if you'd a right to be there.' And the lad said—

" 'But I have no right to be there.'

"And then says I, 'Why, it's your own Father's house, and surely you ought to be welcome there, though maybe you didn't know it, for nobody had told you before.'

"And when I said something about his Father, his face went all

red at once, and some big tears came into his eyes, and when I asked him why he cried like that, he said—

“ ‘Why, it’s because you talk about my father; and I have ’t got a father as I know of; I only wish I had.’ ”

“You see he is an orphan boy. And when I told him that God in heaven was his Father, he looked as if he heard more than he could understand or believe. And it was in our house that I was a talking to him, for I’d axed him in one night. And my daughter Miriam, she says to him: ‘Why don’t you say our Father when you say your prayers?’ ”

“But he, poor lad, said, quite simple like—

“ ‘I never do say my prayers. I should only like to know how.’ ”

“And my daughter Miriam, she looked with wonder, for you see she didn’t think that there could be in our neighbourhood people so ignorant as that.

“Well, we got the New Testament and read with him the Lord’s Prayer—he can just read a little; and then my daughter Miriam and me, we began to hear him say it over a verse at a time from memory. And I tell you, Miss Ellen, it just seemed as if one of our little children as is now in heaven was learning to say his prayers at his mother’s knee again. Only the child was a big lad, nearly sixteen years old, and mother was my daughter Miriam, who’s just like my dear old woman in looks and voice and almost everything ’cept age. And the lad Jimmy, he said, ‘Thank you’ as well as he could, when he’d had his first lesson; but bless you his heart was very full, I assure you, and he couldn’t say much. But by-and-by he came again, and my daughter Miriam, she heard him say his prayer, and he had every word exact, and he seemed so glad and thankful that he’d learnt to say those beautiful words of Jesus.”

There was a soft brightness in Mr. Norlan’s eyes as he related these things about the lad of ‘his own picking up.’ But there was no boasting or self-glorification, only the expression of that sweet joy which always comes when we try to be of service to any, even the humblest, of our fellow-creatures.

It was now evident that Jimmy Jortin had entered upon a new era in his life. The higher part of his nature was gladly responding to the happy influences under which he had been brought. Jimmy’s life was experiencing a sudden expansion such as a short time before he could not have anticipated.

He was like a plant from which the frost-bonds of winter were unloosed, and whose new life was coming under the influences of a happy springtide. As we have seen, he could already read a little. How he had learnt he scarcely knew. But it had been necessary that he should be able to make out the directions upon hampers, the names upon costermongers’ barrows, over shops, and upon the doors of houses, and little by little he had learnt sufficient of the English language to make him equal to these tasks. But he now began to read more than this, the library of the Sunday school, to which Mr. Norlan had not

failed to introduce him, being his grand source of supply. He began to think of the strange things which had happened to him, and to hope that a better life might be before him. We have seen also that prayer, that strongest uplifter of human lives, had become a part of his new experiences.

There were now no longer any Sunday evenings hanging heavily on Jimmy's hands; the mornings also of these blessed days he gladly devoted, when he could, to the Sunday school and the chapel service.

One Sunday evening, when Jimmy was in the stable, combing his hair, brushing his coat, and arranging his toilet, as best he could, with the aid of a bit of broken looking-glass which he had fixed up over the corn-bin, he turned round and saw Bosker directing his large eyes towards him, as though that patient animal wondered at the new ways of his keeper. And Jimmy said—

"Ah, ah, Bosker, what yer a watchin' me, are yer? And yer think I'm getting mighty pertic'ler nowadays, do yer? Well, so I am, ould fellar. But yer needn't be consarned about it. It's true I've got some new friends, Bosker, but I'm not a goin' to think the less of my ould trudger. Why, bless yer, I was readin' t'other day as 'ow Jesus Hissel once sit upon a donkey, an' the folk spread their fine clothes on the road, an' branches o' palm-trees, an' shouted Hosannah! an' made such a stir. Why, I think they'd a frightened thee. But it showed as Jesus wasn't ashamed of a poor donkey, didn't it, Bosker?"

And then Jimmy patted and caressed his old friend as was usual before leaving him; and having locked the stable-door, and hung up the key in the house, he went at a quick pace down the street to be in time for the evening service.

It was scarcely likely that these changes should take place without being noticed at length by Mr. Dan Lowthorpe, Jimmy's master. That individual had not concerned himself about the moral welfare of the boy—a responsibility this which he had never recognised. The boy was as necessary for his service as the donkey, and they stood on about the same level in the master's eyes. He housed and fed the one, and he housed and fed the other, for the same reason, namely, because of the work he got out of them. Accordingly, when the work was done, the time varying much on week-days, but being seldom early, the lad was at liberty to do as he pleased. Sunday was generally a rest day, being observed as such because on the whole Mr. Lowthorpe thought it was best for himself and his servants, and not at all because he felt any reverence for the day. Now and then, when he had made a special purchase of fruit or fish, he thought it worth while to break the rule. He was a careless, godless man, having all the vices of his class and hardly one of their excellences.

On this particular Sunday evening Mr. Lowthorpe saw Jimmy set off from home after doing his work in the stable.

"Where can the lad be going?" he asked himself. Curiosity led him into the stable; possibly he thought, "Jimmy has neglected some-

thing in his anxiety to get away." He looked at the donkey and into every corner, but all was right—every part of his work properly done, even to the cleaning of the poor and shabby harness, of which Jimmy always tried to make the best.

"But what is this?" said Mr. Lowthorpe, as he took down a book from a shelf in the corner which Jemmy had put up for his private use.

"H'm, a book, is it? So he's begun to spend his time an' mine in readin', has he? What's it about, I wonder?" said Mr. Lowthorpe, as he opened the book and looked at the title-page. "Oh, oh, just so; 'Christian Worthies.'—Christian humbugs, that's wot I say. So he's begun to fill his head with this sort o' rubbish, has he? An' in a bit o' time he'll be too good for his job. I know wot'll come o' this sort o' stuff."

As Jimmy's master was thus talking to himself and turning the book about in his hands, his eye fell upon a label which was pasted within the cover.

"Oh, I see! I might have thought as much—he's got it from a Sunday school. An' that's the reason of his being up so soon on a Sunday morning, an' making hisself so smart; why, he'd use up a set o' blacking-brushes in a month. That's the bis'ness, is it? An' he thinks as I shall let him drop into them sort o' religious ways, without axing my leave too. But I say as that it won't pay, leastways for me." So Mr. Dan Lowthorpe sent "The Christian Worthies" with a bang to the other end of the stable, and went away resolving what he would do.

CHAPTER XI.—WHERE IS HE?

THE anger excited in Harry Walton's breast because of his father's harsh dealings with him, as he still considered them, had not subsided on the day he left home. While yet he remained in the house he was sullen, almost speechless. Ellen sought every possible opportunity of leading him to think more kindly of Mr. Walton's decision, but her endeavours met with but small success. When he went away both his mother and Ellen begged him to let them have intelligence of his doings. But he would not promise to write to them, and when once away from the house he determined that he would not do so. Hence the separation became painfully complete, and a silence followed which could hardly be borne. The eldest of the family had gone, and no one knew more than that he took a ticket for London, that he was seen by a person who knew him but slightly to alight from a train in one of the great railway stations of the metropolis, one amongst a crowd of people who quickly dispersed from the station platform and were lost among the millions of the city. It was known that he intended to find a ship in London, but no one could guess where in the wide world he might be now.

There was an old map of the world hanging in one of the rooms, the sight of which, with its immense waste of waters, its far-stretching continents and solitary islands, seemed the general sadness of the house. Many a furtive glance was cast towards it during the day by one member of the family or another. But there was none who could tell where in all the vast extent of space represented there the object of their solicitude could be found.

The newspapers were searched with a new interest. Names of ships to which had happened any of the many casualties of the sea were painfully noted, and when, as sometimes they found the names of the lost crew were given, with what trembling anxiety were they read!

Ellen's position in the house was specially distressing. She was the only one who had given Harry encouragement in his plans. And she felt now as if she was partly responsible for the calamity which had happened to the house. A few short months before, winter's cold and desolation prevailed without, but within the house was an unbroken family circle, dwelling in warmth and light and love. Now the conditions were reversed. The outside world was full of summer's glory, but the world within the home was chill and sad.

Ellen knew not how to blame herself for the little help she gave to Harry. She was not conscious of having done wrong in the matter, though she was undoubtedly concerned in her brother's departure. Nancy, however, was quite confident that Ellen was blameworthy, and did not fail to say so.

"I can't understand Ellen," said she one day, when Mrs. Walton, Ellen, and herself were sitting sewing together. "She professes to be as sorry as any of us, yet she did her best to bring about this trouble."

"It is scarcely kind of you to say so," said Ellen.

"Not kind? Oh, no, I should think not; it is just like you, Ellen—if one speaks the plain truth you think yourself injured."

"Not quite so, sister."

"Well, I think it is right," continued Nancy in a stinging, snappish manner, "to say that you are much to blame in giving Harry any help at all."

"Nancy, I had rather you did not speak so to Ellen," said Mrs. Walton.

"Oh, no, Ma, of course not; you always think Ellen can do no wrong."

"My child!" answered Mrs. Walton in a grieved and reproachful tone.

"Well, I am sorry I said that, Ma; but really you must disapprove of what Ellen has done."

"I do not know that we do well in trying to condemn the conduct of any at present," said Mrs. Walton, mildly and kindly. "This is a trouble such as we little anticipated. We can only bow our heads before God, asking Him to grant forgiveness to us all, to give patience to us at home, and gracious protection to our loved one away."

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

IX.—PATIENCE AND IMPATIENCE.

“Make haste slowly.” “The world is his who can wait.” “Haste trips up its own heels.” “Hasty climbers have sudden falls.”

THE impatient child says, “I can’t wait; I must spend my penny *now*; I must have my toys and play and sweets *now*.” But children are not more impatient than many men and women. Many can work while but few can wait. Action is often easier than repose. It is true that now and then we meet with men of noble character and perfect self-control, who combine vast energy with marvellous patience. They have learned “to labour and to wait.” Having done all, they stand. Bunyan’s Pilgrim was shown into a little room in a stately palace. In this room sat two boys—the name of the one was Passion, the name of the other Patience. On the face of Passion unrest and discontent were written in dark, broad lines. On the face of Patience peace, stillness, and satisfaction were plainly imprinted. At the feet of Passion there was cast a bag of treasure. How eagerly did he grasp it; how scornfully did he laugh in the face of poor Patience, who as yet seemed to possess but little. How lavishly did Passion spend his treasure, and how soon he brought himself to rags and wretchedness! Patience received his portion last, but when it did come it was a large and lasting portion. It was well worth waiting for. There is a plain old proverb bearing upon this point which may be of great service to us. It is this—“Be still and have thy will.” The men that hurry and worry, that run helter-skelter in pursuit of their prize, often defeat their own ends, and fall into ruin and misery; while those who stand still see the salvation of their God. What is it that brings so many young men and men of business into difficulty and disgrace? It is a feverish and insane haste to be rich. How is it that that well-known lad John Sharp has so often to do his lessons over and over again, that at the best he is but a shallow scholar, only “crammed and coached,” and then on examination days, while other boys pass with honour, he is “plucked” and sent home with sad heart? *It is haste.* How is it that that girl Miss Lucy Smart, in spite of her pretty face, fluent tongue, and boasted cleverness, has done so wretchedly in life? At one time she promised to leave all her schoolmates and friends far behind. But if you look at her in the school, in the church, and in social life, you are compelled to admit that she has won little confidence, that she exerts little influence, and has done little good. She is married now, and if you pay a visit to her home you are impressed with the superficial, slipshod, disturbed aspect of the house.

It ought to be distinctly remembered that "haste makes waste"—waste of health, waste of time, waste of substance. "Short cuts" to fame, learning, and wealth not seldom land men in dismal bogs. We have often seen striking illustrations of this familiar saying, "The more haste the less speed." Boys and girls should give heed to the advice so often given—"Take your time and do it well," for "what is worth doing at all is worth doing well." One proverb says that "Good and quickly seldom meet." There are times in our lives when even this paradoxical saying may be of capital service to us—"Tarry awhile that you may get there all the sooner." Tarry not in sloth, or sin, or cowardice, but in prayer and patience. "Prayer and provender hinder no one." Faith in God gives deep repose. He that believeth shall not make haste. The grand purposes of life are accomplished not alone by bustle and toil. As Milton has so nobly said—

"God does not need
Either man's work or His own gifts ; who best
Bear His mild yoke, they serve Him best : His state
Is kingly ; thousands at His bidding speed,
And post o'er land and ocean without rest ;
They also serve who only stand and wait."

This lesson of waiting is one we all need to learn. It is needed in suffering and in labour. We must wait for answers to prayer, wait for the fulfilment of promises, wait for the reward of toil, wait for the replies to our deepest and most anxious questions. The most delicious fruits are those which are longest in ripening, the most colossal and valuable trees are the longest in maturing. Mushrooms may spring up in a night, but oaks need centuries in which to unfold their energies.

The impatient man quickly strikes the blow, but misses the mark. The patient man may be longer in striking, but when he strikes he hits the nail on the head. "He is slow and sure." "Hasty climbers have sudden falls." They cast their eager eyes toward the mountain summit, it seems so near and so tempting and grand ; they see the mountain track, well beaten and clearly marked ; along that track countless feet have passed safely though slowly to lofty heights of knowledge, purity, and moral grandeur. But these hasty climbers disdain to tread on beaten tracks ; they "climb up some other way." The result too often is broken limbs, bruised hearts, mortified pride. A poor man has a little money left him. To him it seems an immense fortune. He leaves the shop, puts on his coat, buys a gold watch and chain, a costly ring for his finger, smokes costly cigars, carries a silver-headed stick, and sets himself up for a gentleman. He has got to the summit by a few strides. But this hasty climber has a sudden fall, and the fall is great and crushing. This is no fancy sketch ; I speak that which I have seen.

Impatient people mar the peace of those with whom they live and work ; their fretful words and impatient looks rasp and worry and

sting even contented hearts. There is a capital little story told of an old lady, who for many years had been vexing and wearing her soul to death; like a child pulling a rose to pieces, she had been pulling her heart to pieces. At last a sudden change came over her; she was calm and peaceful. When asked how it was she was so altered, she said, "I have for many years been trying and praying to get a contented mind, and now I have made up my mind to be content without one, and to remain just as I am."

The impatient farmer will not let the seed take root, for he turns it up to see if it is growing, but the wise husbandman waiteth for the precious fruits of the earth, and hath long patience for it until he receive the early and latter rain.

God Himself is wonderfully "patient and long suffering toward us, not willing that any should perish, but that all should come to repentance."

"Be patient; oh, be patient, put your ear against the earth, Listen there how noiselessly the germ of the seed has its birth. How noiselessly and gently it upheaves its little way, Till it parts the scarcely broken ground, and the blade shoots up in day. Be patient; oh, be patient: the germs of mighty thought Must have their silent under-growth, must under ground be wrought. But sure as there's a power that makes the grass appear, Our land shall be green with virtue, the blade time shall be here."

Nothing is more remarkable in the life of Christ than its sublime leisure and deep repose. No haste, no worry, no feverish passion there. With Him, as with His father, a thousand years are as one day. Often now as of old He speaks to His disciples, as He sees them distracted amid the rush and whirl of life, brain and heart all on fire with excitement and business, "Come ye yourselves apart into a desert place and rest awhile." And again, with still deeper tenderness, and in more pleading tones, "Come unto Me all ye that labour and are heavy laden, and I will give you rest."

SAGACITY OF A DOG.

DEAR SIR,—

Reading the short article on Animal Instinct in the JUVENILE this month reminded me of a remarkable act of sagacity that I once witnessed on the part of a dog. Perhaps a corner might be found for it in the INSTRUCTOR. We were on our way to our beautiful chapel in Peckitt Street, York, one Sunday morning, and had reached the south side of the River Ouse, when we observed on the opposite side two dogs playing and frisking about. After gambolling on the river's brink for some moments one of them slipped in, and its endeavours to get out were unavailing, although the water was within a foot of the pier. We watched the other dog, a kind of terrier, endeavouring by stretching down to get hold of the one in the water. All its efforts, however, were in vain, for it could not

touch the drowning animal. The distress exhibited by the terrier was very marked, and it appeared as if the dog would be drowned. Suddenly a thought seemed to strike the terrier, for off it ran, and after half a minute's absence returned in company with a man, who rescued the half-drowned dog, to the apparent delight of its companion and to our own great relief. The man had evidently been drawn by the entreaties of this noble animal.—Yours respectfully,
June 10th, 1878. WM. A. TODD.

WORK.

MY DEAR YOUNG FRIENDS,—

I am anxious to address you briefly. The subject at the head of my paper is one which we have to carry out while in this world. You must remember that the Great Teacher Himself said when upon the earth, "I must work the works of Him that sent me while it is day; the night cometh when no man can work." You are aware, of course, how He finished the work God gave Him to do. You may find that all God's great saints in sacred history were those who worked, or had some great mission to accomplish. Will you allow me to ask you what you are doing for Jesus? I must tell you that there is plenty work for you all to do. I hope, in the first place, you have received the pardon of your sins and been made happy in the love of Jesus, and then I am sure you will be better able to work for Him and live a useful Christian life. There is a vast field for us to labour in. Yes, we can all do something for Jesus. I hope all the young friends of the JUVENILE INSTRUCTOR are trying to do something. Youth is the best time to serve the Saviour and also to work in His vineyard. I trust also that every effort which you may put forth in the strength of Jesus will be crowned with great success. May your earnest desire be—

"I want to be like Jesus,
Engaged in doing good."

Plymouth.

THOMAS HEATH, JUN.

A WORD TO BOYS.

WHAT do you think, young friends, of the hundreds of thousands who are trying to cheat themselves and others into the belief that alcoholic drinks are good for them? Are they not to be pitied and blamed? Do you want to be one of these wretched men? If we are to have drunkards in the future, some of them are to come from the boys to whom I am writing, and I ask you again if you want to be one of them? No? Of course you don't.

Well, I have a plan for you that is just as sure to save you from

such a fate as the sun is to rise to-morrow morning. It never failed; it never will fail; it cannot fail; and I think it is worth knowing. *Never touch liquor in any form.* That's the plan, and it is not only worth knowing, but it is worth putting into practice.

I know you don't drink now, and it seems to me as if you never would. But your temptation will come, and it will probably come in this way:

You will find yourself some time with a number of companions. They will have a bottle of wine on the table. They will drink and offer it to you. They will regard it as a manly practice, and very likely they will look upon you as a milksop if you don't indulge with them. Then what will you do, eh? What will you do? Will you say, "Boys, none of that stuff for me! I know better than to drink that?" Or will you take the glass, with your own common sense protesting, and your conscience making the whole draught bitter, and a feeling that you have damaged yourself; and then go off with a hot head and a sulking soul that at once begins to make apologies for itself—just as the soul of Colonel Backus does and will keep doing during all his life?—*St. Nicholas.*

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

SEPTEMBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
1 The Land Divided	Joshua xviii. 1—10 ...	Prov. xvi. 33.
8 The Cities of Refuge	Joshua xx.....	Heb. vi. 18.
15 The Altar of Witness.....	Joshua xxii. 11—29...	Ps. cxlv. 4.
22 Joshua's Warning	Joshua xxiii.....	ver. 11.
29 God's Mercies to Israel ...	Joshua xxiv. 1—18 ...	Deut. viii. 2.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
THIRD QUARTER.		
1 Mission of the Seventy ...	Luke x. 1—9, 17—24	ver. 9.
8 The Good Samaritan	Luke x. 25—37.....	Gal. v. 14.
15 Importunity in Prayer ...	Luke xi. 1—13.....	xviii. 1.
22 Warning against Covetousness]	Luke xii. 13—30	ver. 15.
29 Review of the Quarter's Lessons		

OCTOBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
6 Israel's Promise.....	Joshua xxiv., 19—33...	ver. 24.
13 The Promise Broken.....	Judges ii. 1—16	Isa. i. 2.
20 The Call of Gideon.....	Judges vi. 11-18, 36-40	Jer. i. 7.
27 Gideon's Army.....	Judges vii. 1-8, 16-23	Zech. iv. 6.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
6 Improvement of Privileges	Luke xiii. 22—35.....	ver. 24.
13 The Gospel Feast	Luke xiv. 12—24 ...	ver. 15.
20 The Prodigal Son	Luke xv. 11—32	ver. 18.
27 The Rich Man and Lazarus	Luke xvi. 19—31.....	Prov. xiv. 32.

BIBLE QUESTIONS.

1. Where did the patriarch Abraham buy a grave?
 2. Whose life did Saul in vain attempt to save?
 3. What mighty king did strange reverses see?
 4. After what manner should our converse be?
 5. Where did St. Paul "the unknown God" declare?
 6. What monarch's cup did Nehemiah bear?
 7. What city did the Lord's long suffering spare?
 8. Who shelter to Elisha did afford?
 9. Who prophesied the coming of our Lord?
 10. Whence came the gold the temple to adorn?
 11. What churl received a modest prayer with scorn?
 12. Who slew a thousand men without a sword?
- Look upwards and behold what Christ above hath for the faithful won:
Safe folds, wherein His sheep shall rest when the last day of life is done.

JUVENILE MISSIONARY MEETINGS.

STEPNEY, HULL.—The twenty-fifth anniversary of the Stepney Sunday School, Hull, was held on Sunday, June 30th, and Monday, July 1st. Two sermons were preached in Stepney Chapel—in the morning by the Rev. F. Jewell, the superintendent minister. In the afternoon, at 2.30, an address to parents, teachers, scholars, and friends was delivered by the Rev. G. T. Candlin, which was delivered in his usual telling manner. Additional attraction attached to this address, as Mr. Candlin is now on

his way to China as a missionary, and this was his last service previous to leaving this country. In the evening we had an excellent sermon from the Rev. G. Wheatley, the newly-appointed minister to the Circuit, from the text Heb. xi., 24—26. On Monday evening, July 1st, the annual meeting was held in the chapel. After appropriate remarks from the chairman, Mr. John Beauteament, the secretary read the report, which showed that the number of scholars on the books was 220, with a staff of 33 teachers; also that during the year over 60 scholars have joined the Church. The following gentlemen then addressed the meeting:—Revs. F. Jewell and G. Wheatley, Messrs. F. Oliver and J. T. Warn. The meetings were well attended; the collections amounted to £10 4s. 6½d.

JAMES A. WILSON, Secretary.

LONG EATON, NOTTINGHAM.—On Sunday, June 23rd, the anniversary sermons in connection with our Zion Chapel Sunday School were preached in the above place of worship, morning and evening, by the Rev. J. L. Fox, of Manchester. In the afternoon a children's service was conducted by the same minister. On the following day the children paraded the town, headed by the Temperance brass band, and at four o'clock a public tea was held. After tea Mr. E. White's field was opened for recreation, &c. A large number of persons were present, and a pleasant day was spent. Collections on Sunday amounted to £31, which were devoted to the New School Building Fund.

BRUNSWICK SUNDAY SCHOOL JUVENILE MISSIONARY SOCIETY.—The 28th annual meeting of this society was held on Monday, June 24th. The chair was ably occupied by our esteemed superintendent, Mr. J. R. Shrubsall, whose presence lent a homely influence to the meeting. The report was read, which showed an increase on the balance of last year of £7 6s., which was raised solely by the collecting-boxes that are taken round every Sunday to each class. The adoption of the report was moved by Mr. F. Shrubsall, and seconded by Mr. W. P. Thomson, in two appropriate and interesting addresses. During the evening recitations were given by the scholars, and the choir sang a selection of music under the conductorship of Mr. Thomson, sen. An address, both humorous and stimulating, was given by Mr. A. Howard, after which the meeting terminated with prayer. The financial statement is as follows:—Collection at annual meeting, 17s. 3d.; Collection at Rev. A. Collinson's lecture, 15s. 9d.; Collecting-boxes, by girls, £5 13s. 7½d.; Collecting-boxes, by boys, £13 10s. 1½d.; Collecting-boxes, by infants, 18s. 10½d.; Afternoon collections at quarterly meetings, £1 15s. 8d.; From lecture by Sunday School Union, £1 9s.; By entertainment by Band of Hope, 9s. 2d.; By Christmas Tree entertainment, £3 15s.; By New Year's Offering, £5 4s. 6d.; Mr. Shrubsall's box, 19s.; Mr. Crockford's box, 8s. 9d.; Bertram T. Lee's farthings, 9s. 3d.; An Offering to the Lord, £5. Total (less expenses, £4 12s.), £36 13s. 7d.—HORACE HOWARD, Hon. Sec.

Memoir.

JOSEPH EDWIN BARROTT, OLDHAM.

WE write a brief notice of this dear boy as the reading of it may possibly comfort some young sufferer, and perhaps be rendered a blessing to boys and girls rejoicing in good health.

Joseph Edwin Barrott was born December 24th, 1864, and became a scholar in Union Street Sunday School when he was four years of age. He loved the school, and profited by the instruction received. By his regular and punctual attendance, and his quiet and orderly deportment, he secured a number of "prizes" from teachers and officers. Though young he was ever glad to accompany his parents to the House of God, and manifested a more than ordinary interest in the service. He often enjoyed also a quiet cottage meeting conducted by the town missionary. And being thus associated with the means of grace, his delight in things good and pure increased, and he became a great comfort to his father and mother. But about two and a half years ago he began to suffer from a complaint of the spine. As long as possible he walked to school and chapel on the Lord's day, and when unable to do so welcomed to his home his teacher, myself, and other friends, who occasionally visited him. His affliction was a grievous one, but he bore it meekly, believing that he should finally reach the land where there is no more pain. He knew, however, that his sickness severely taxed the energies of his parents, and often told them that he could never repay them for their tender love and watchful care, but, said he, "The Lord will repay you."

He was fond of singing, and when alone cheered his heart by such hymns as "Safe in the arms of Jesus," "Now in a song of grateful praise," "Come, ye who love the Lord," with chorus:—

"There'll be no more sorrow there,
There'll be no more sorrow there;
In Heaven above, where all is love,
There'll be no more sorrow there."

A friend gives the following account of a visit to him:—

"I read a portion of the 1st chapter of Revelation, and while reading and speaking to him about Heaven and its blessedness, he seemed to forget his suffering in the thought that he should soon be there. When at prayer I repeated the hymn—

'There is a better world, they say,
Oh, so bright!'

During which his 'Amen' and 'Thank the Lord' were so loud and frequent that it was with difficulty I could proceed. When I had finished I bade him 'good night,' and went down stairs. He then began to sing—

'When He cometh, when He cometh,
To make up His jewels.'

He was almost too weak to sing at all, and when he reached the second verse I thought he would not manage the third; but he appeared for the moment to have new strength, and so continued—

'Little children, little children,
Who love their Redeemer,
Are the jewels, precious jewels,
His loved and his own.'

' Like the stars of the morning,
His bright crown adorning,
They shall shine in their beauty,
Bright gems for His crown.'

"I shall not forget that night as long as I live : it was indeed a time of refreshing from the presence of the Lord."

About half-an-hour before he died his mother said to him—"Joseph, if it be the Lord's will to take you, are you willing to go?"

He looked at her for a moment, and then said—"Willing to go? Yes; I *am* willing to go."

He shortly afterwards asked to be fixed in bed with his face to the wall, and in this position his spirit passed peacefully away to Heaven, May 11th, 1878, aged thirteen years and six months.

SAMUEL WALKER.

Poetry.

A LITTLE CHAIR.

Oh! the children, happy children,
Smiling everywhere I go;
Some as brown as autumn berries,
Some as fair as winter's snow.

Some with eyes as blue as morning,
Some with eyes as dark as night,
Some with faces strangely thoughtful,
Some with faces strangely bright.

And the while I gaily greet them,
Back my heart returneth where,
In my room, amongst my flowers,
Stands a baby's little chair.

But, alas! the laughing darling,
That in precious bygone days
Sat there, never more will cheer me
With his pretty, naughty ways.

Cunning foot placed on the table—
When his noontide meal was o'er—
Cup of milk poured on the sugar,
Spoon and fork dropped on the floor.

Then when "mother's" face grew cloudy,
Little arms around me thrown,
Little hands my cheeks caressing,
Sweet tips pressed upon my own.

Oh! the children, happy children—
Yes, I meet them everywhere;
But at home, amongst my flowers,
Stands a baby's empty chair.



WAIFS.

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W A I F S .



THE picture we give this month is very different to the one given in the last JUVENILE. The scenery of it was pleasant to look at, and then by the side of the cheerful brook we saw a boy running with bat over his shoulder, suggesting to us what a happy boy he was. He no doubt had a nice home, loving parents and brothers and sisters, and also merry playfellows with whom he could have many a jolly game. But in the picture we now give we see two poor, sad, and desolate boys. They are clothed in rags, have no shoes for their feet, nor covering for their head. No father and mother work to make them a comfortable home. They can only appease their hunger by the scanty pence given by strangers for whom they make clean the street-crossing. And when the day is spent and they are tired out, instead of renewing their strength by sweet slumbers taken on a soft bed in a warm room, they have to huddle themselves together under an archway, and sleep as best they can in the cold. Poor boys! theirs is a hard lot. But not the lot of many, you perhaps think. We are sorry to say it is otherwise. There are many thousands of such boys in our large towns, especially in London. They are called "waifs," the name, you see, which we have put under the picture. A waif is something found without an owner; so no one owns these miserable lads. A policeman may arrest them and bring them before a magistrate, but when asked to give an account of themselves, no father, or mother, or relative steps forward and says, "These boys are mine, and if you will set them at liberty I will take them home and better care for them in the future." So they get punished by being sent to prison, or, what is better, they are placed for a few years in a reformatory and taught some manual art by which they may gain an honest living.

BEN BARLOW'S BUDGET.

By TOM BROWN, *Author of "A Year at School," &c., &c.*

Letter No. 135.

FROM MRS. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne,
September 22nd, 187—.

MY DEAR BEN,—

We returned from Weston yesterday all very much better for our trips; and especially is this the case with little Ernie. His general health is very much improved, and, as a consequence, his spine is stronger. He can manage to walk pretty fairly now. He will stay here a few weeks longer and then go home. We shall miss him very much of course, but then his mother is most anxious to have him with her again.

I suppose you know we have a new groom. Bob stays with us for the present until his affairs are definitely settled. What he will do with himself when he leaves us I cannot say; but while he is here, at any rate, he *will* take a share of the stable work, no matter what is said.

Your friend Thornton called last night to congratulate Bob on his good fortune. He gets quite manly looking, and talked very gravely about trade, the crops, and the weather. I always liked him, even as a boy. With love from father, sisters, Ernie, and myself, I am your affectionate

MOTHER.

Letter No. 136.

FROM DR. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne,
October 5th, 187—.

DEAR BEN,—

I have again some startling news for you. Unfortunately of a different character from the last.

I had just got home last evening from paying a professional visit, when a messenger came running to the door to say I was wanted on the common—Mr. Thornton having been thrown out of the post-cart. I at once started off, and as Bob was at hand I took him with me, knowing how handy he is in cases of accident.

When I reached the spot named, I found they had carried Mr. Thornton into the cottage that stands on the edge of the common. He was perfectly unconscious, and for a time I feared he was dead. At length he revived. His first words were—"Send the mail-bag on." I sent a trusty messenger with the letters to Hammerthorpe, and then tried to ascertain the extent of his injuries. I was unable,

however, to do so in the cottage, and as he remained perfectly conscious I got a conveyance and took him to his home. Of course I sent beforehand to break the news to his wife.

On examining my patient I found his injuries very grave indeed. He has one rib broken, besides a severe fracture of the skull. The latter is by far the more serious. I visited him twice during last night, and have seen him three times to-day. I fear he cannot possibly tide over it. He again became unconscious early this morning, and now he is delirious, which proves his brain is injured in some way.

I have sent Bob to Hammerthorpe with a note requesting the most experienced surgeon at the hospital to oblige me by a consultation, and if it is within our skill my old friend shall be restored to his family. I, however, have little hope. I think his recovery rests in other hands.

Of course Mrs. Thornton is overwhelmed by this disaster, so is poor Charlie. He went to the office as usual this morning, but directly his masters heard of his father's accident, they gave him permission to go home and attend to the duties of the post-office for a day or two until other arrangements could be made.

The Hammerthorpe surgeon has just arrived, so I must close and go to meet him at Mr. Thornton's. I remain your affectionate father,

OLIVER BARLOW.

Letter No. 137.

FROM BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,

October 6th, 187—.

MY DEAR CHARLIE,—

I hardly know what to say now that I have taken up my pen, but I cannot bear that you should think me indifferent to your great trouble.

I was almost thunderstruck when I got the news of your father's terrible accident. I don't think the fire in our bedroom startled me more. But it must have been a great deal more terrible for you to return from business and find your father so badly hurt. I wish I were at home to be near you, for I feel as if whatever I may say will only renew your pain, whereas if I were with you I might show my sympathy in silence.

I suppose the horse must have shied at something, for I know your father was considered a careful driver, and the horse seemed steady enough, too.

And now, dear Charlie, I can only attempt to comfort you a little by the hope that your father is not permanently injured, and that in a few weeks he may be again able to attend to his duties. You know, too, in whose hands his case lies after all that my father or any other doctor can do, and you must try to get strength, if not

consolation, from thinking that God knows what is best under all circumstances, and that He will direct all things for good.

Do not attempt to answer this, old fellow, if you feel at all disinclined for correspondence. I shall hear regularly from home about your father's progress. But if it would be a relief to you to write, I shall be most happy to hear from you, I remain, my dear Charlie, your old friend,
BEN.

Letter No. 138.

FROM CHARLIE THORNTON TO BEN BARLOW.

Woodbourne,
October 7th, 187—.

MY DEAR BEN,

Many, many thanks for your letter. It was a great comfort to me to feel your ready sympathy. I am sorry to say father remains much the same. I begin to despair of his recovery. Your kind father tries to look cheerful and tells me to hope for the best, but the doctor he brought with him did not seem to give much hope.

You would pity father if you could hear how he wanders in his mind. He doesn't know I'm staying at home, so he is always wishing he had made up the bag, or saying he shall get into trouble for not filling in his returns.

From what we can hear, the horse shied at a woman wearing a white shawl, and, as he was going down hill, the jerk threw him on his knees, and poor father fell head first out of the trap against a low stone wall that borders the road. I was always afraid of the horse down hill. He had been down before.

Did your father tell you that Mr. Carson had given me a few days holiday so that I might look after the business? Everybody is very kind to us. The neighbours take turns in relieving mother from sitting up all night. Mr. Bland has been here every day. He had a long talk with me this afternoon, I think I feel more cheerful since he came. I don't know why. It was not because he was very hopeful of father's recovery, for I could see he thought him dangerously ill. But he told me, as you did in your letter, to try to leave all with God, He quoted one verse that I have been thinking of ever since—"Cast all you care in Him, for He careth for you."

I know you will excuse my writing more now. I am yours very gratefully,
CHARLIE THORNTON.

Letter No. 139.

FROM DR. BARLOW TO BEN BARLOW.

The Laurels, Woodbourne,
October 8th, 187—.

DEAR BEN,—

My worst fears are realised. Mr. Thornton is dead. His case

reached its crisis this morning. I at once saw there was no hope. therefore did all I could to render his remaining moments more peaceful. I was rewarded by his recovering consciousness about half an hour before he passed away.

I have stood at many death-beds, but I think I never saw such a peaceful end as Mr. Thornton's. Mr. Bland has visited him frequently since the accident, and on hearing that his delirium had ceased, he at once came and gave him such consolation as he deemed suitable to his case. Mr. Thornton listened with calm and devout attention, professed his perfect repose on Christ, and requested to partake once more of the Lord's Supper. In this I joined him.

Just before he died he took an affectionate farewell of his wife and son. His wife—so soon to be a widow—he committed to the care of Charlie. I shall never forget the wise and earnest words he addressed to him.

"You must look after your poor mother, Charlie, when I am gone," he said; "always consider her wishes and her welfare before anything else. If you do, my blessing shall rest on you, and the blessing of God shall follow and prosper you. I leave her to you with every confidence, for you have been a good son and are thoughtful beyond your years.

"For yourself," he added, "serve God and do your duty to your fellowmen, and if worldly success should not attend you, you shall have, what is better still, a peaceful conscience and the respect of those whose good opinion is alone worth having. I cannot leave you money. I bequeath you a good name. Don't tarnish it. But I have spoken to you of that before. I would have you become a better man than I have been, but I thank God he has enabled me to live honestly and soberly all my life in this neighbourhood. I do not think I have one enemy, and my friends—I cannot count them. I owe it all to my having tried to live a Christian life as my father did before me. I feel exhausted now. If I may not speak again, I commend you both to each other, and to God."

A few minutes afterwards a cry from Mrs. Thornton, who was supporting her husband's head, told us that the death struggle was over. Well might we who witnessed his end say, "Let me die the death of the righteous, and let my last end be like his."

I expect he will be buried on Thursday. What arrangements will be made as to the future I cannot say. The funeral expenses will be borne by the village club; but Mr. Thornton's wages and the profits of his little business have been so low that he has not been able to make any provision for his family.

With love from us all, I am your affectionate father,

OLIVER BARLOW.

Letter No. 140.

FROM BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
October 9th, 187—.

MY DEAR OLD FELLOW,—

If I felt a difficulty in writing to you before, what shall I say now that your trouble has assumed its most dreaded form? I feel bitterly the weakness of any consolation I might offer.

It must sound like mockery to ask you to believe that this calamity has happened for the best. You have not only lost a dear father, but, by the same stroke, the care and responsibility of the home devolves on you. It seem incredible that you who are younger than me should be in such an anxious and responsible position. But if you cannot see why this heavy blow should have befallen you, and though you may never be able to see in it anything else than an unfortunate accident, you must try to believe that God can bring good out of it. I feel sure He will open your way for you and direct your path.

Let me know what your future plans are as soon as you feel well enough to write, believe me, your true friend,

BEN.

Letter No. 141.

FROM TOM BLUNT to BEN BARLOW.

Old Mill, Woodbourne,
October 13th, 187—.

DEAR BEN,—

Of course you have heard from home about poor Mr. Thornton's death. He was buried yesterday. I never saw such a funeral in Woodbourne before. As you know, it isn't very far from the house to the church, so they had no hearse or mourning coaches at all; but more people attended it than at Squire Greene's funeral at Tinbury, that there was so much fuss about.

There were over sixty members of the "United Brethren Society," of which Mr. Thornton was a member. There were twelve postmasters and letter-carriers from the neighbouring villages, and about twenty of the principal farmers and tradespeople, besides fifteen of his fellow teachers from the Church Sunday school. You see everybody respected Mr. Thornton. He was so straightforward and obliging, and such a good Christian. He was liked by everybody, and there were quite as many Methodists as Church people at his funeral. I suppose Mrs. Thornton will have to leave the post-office now.

What a rum thing it is for your Bob to drop into a fortune! It's like a tale in a book instead of real life. I hope he won't leave Woodbourne. He says he don't know where he shall go nor what he shall do yet. He said, half in a joke and half in earnest, he

supposed he should have to do what the lawyers told him, for they had forbidden him to groom your father's horse or clean his trap.

How is your friend Instone getting on? With kind regards, I am yours truly,
TOM BLUNT.

Letter No. 142.

From DR. BARLOW to BEN BARLOW.

The Laurels, Woodbourne,
October 23rd, 187—.

DEAR BEN,—

Mr. Instone came on Saturday to see Ernie, and to give Bob particulars of his inheritance. It seems there is money in the Funds which brings in £260 a year, and the little farm with the house lets for £125 a year, so that Bob will have an income of more than £7 8s. per week without working.

He is more bewildered than ever as to what to do with himself or the money. He declares he won't stay here a week longer unless I let him work for his living. But, then, if I let him go somewhere else, I'm afraid he will become the prey of some designing knave, for his good luck, as it is called, is talked of far and near. So Mr. Instone and I have arranged with him to stop with us as long as Ernie stops, so as to look specially after him. He jumped gladly at this arrangement, so the difficulty of his future course is postponed a few weeks longer.

There is nothing definitely settled yet about Mr. Thornton's successor. The duties are being done by a temporary clerk. Mrs. Thornton has applied for the post-office on her own account, but the officials say they can only let her have it on condition that her son gives up his present situation to assist her. I tell him it would be folly to give up his prospects for the low wages of a postmaster.

Your mother, sisters, Ernie, and Bob send love, yours affectionately,
OLIVER BARLOW.

PAPERS FOR THOUGHTFUL BOYS.

By THOS. STONELEY.

XXI.—ENGINEERING—TUNNELS AND BRIDGES.



N the construction of a railway of considerable length, it is usually found that some portion of the earth rises to such a height that it is best to conduct the line underground by means of a tunnel.

In order to gain an adequate idea of the peculiarities of tunnel excavating, the scene of operations should be visited; and it will then be found that transactions are going on below the surface of the earth full of striking interest. On approach-

ing one of the shafts there will probably be seen the ponderous engine and pumping apparatus, and an immense mound of rock or earth-spoil, the produce of the tunnelling below. Permission having been duly obtained of the authorities, and the assistance of a guide secured, the visitor will then take a slender candle stuck in a lump of clay and prepare himself for his subterranean exploring. Having deposited himself in a tub, and overcome the slight giddiness which the descent may induce, he will observe the lining of the shaft, and the straining of the pumps attempting to lift the mighty volume of water which is continually supplied from the streams which issue in all directions from the crevices and fissures of the earth or rock. These create a sort of Scotch mist, sufficient to wet a "Southern man" to the skin; but, what is remarkable, it does not extinguish the fragile candles, which burn with singular brilliancy. Having descended to the level of the tunnel itself, this may be explored in either direction. And now a striking scene fills the beholder with mingled wonder and awe. A great number of men are at work at either end of the tunnel, some having penetrated into a driftway perhaps thirty feet beyond, while the light which flickers from innumerable "dips," stuck round in all directions, gives a strange appearance here to every object. Some of the men are picking the earth from the sides, others collecting it, by means of shovels and barrows, in a heap out of the way of the miners, while the explosion of gunpowder which has been let into the rock, the crash of the solid material which has been riven in pieces, the fall of the rude masses, and the reverberation sounding through the gloomy caverns, are sufficient to fill the stoutest hearts of those unused to such scenes with alarm, and to leave an impression not easily effaced. Those only are recommended to visit works at a tunnel who are prepared to encounter such risks, and have a strong inclination for the adventurous.

One of the most remarkable railway works that has been completed is the Box Tunnel, between Chippenham and Bath. It is nearly 9400 feet in length, and part of it is 400 feet below the surface of the hill through which it passes. Thirteen shafts were required in its construction and ventilation; the material excavated amounted to 414,000 cubic yards, and the brickwork and masonry were more than 54,000 yards. The number of bricks used was 30,000,000; a ton of gunpowder and a ton of candles were weekly consumed for two years and a half, for the purpose of blasting and lighting, and 1100 men and 250 horses were constantly engaged. For a considerable distance the tunnel passes through freestone rock, from the fissures of which the water flowed so freely that in November, 1837, the steam-engine employed for its removal proved insufficient. One division of the tunnel was filled; the water rose fifty-six feet high in the shaft, so that it was found necessary to suspend operations till the following midsummer, when a second engine of fifty horse-power was brought to the assistance of its brother leviathan, and the water was removed.

The present Thames Tunnel was planned by Brunel in 1823, and in 1824 a company was formed to carry out the work. The first step was to sink a brickwork shaft already built, fifty feet in diameter and forty-two in height, into the ground at 150 feet from the Rotherhithe side of the river. This gigantic labour was accomplished by a powerful steam-engine, which raised the earth and drained the water from within, while the brickwork cylinder, which was calculated to weigh one thousand tons, was sunk into the ground. The horizontal tunnel was then commenced from near the bottom of the cylinder at the depth of sixty-three feet from the surface.

The roadway was begun on New Year's Day, 1826, and upwards of 540 feet had been safely excavated, when, on the 18th of May, the river burst in. With indomitable patience the engineers filled the aperture with an enormous number of bags of clay sunk in the river, pumped the water out of the tunnel, and resumed the work. Scarcely had they proceeded 159 feet farther when the dreaded water again broke in, and six men were drowned. The shareholders were now disheartened, but not so the engineers. After a long suspension of the works, a public subscription and a loan from Parliament enabled them to resume them. On the 25th of March, 1843, the tunnel was finally opened to the public.

Many interesting anecdotes are told in connection with the work. A few days previous to the first contest of the bed of the river with the soil, the feed-pipe of one of the boilers of the steam-engine burst. To stop the pumps might have been attended with considerable inconvenience, if not danger. As it happened, Brunel and his able coadjutor, Mr. Beamish, were on the top of the shaft. Alive to every unusual sound, they ran to the engine-house. Brunel at once perceived the nature of the accident. Seizing some packing and a piece of timber, he jumped upon the boiler, and with wonderful presence of mind applied the packing to the fissure, and one end of the quartering upon that, jamming the other end against the slanting roof of the building. Finding now that the roof was being actually raised, he clasped the quartering, and there hung, like the weight on the safety-valve, until his companion was able to procure sufficient weight to attach to the timber and relieve him from his perilous situation. By this happy expedient time was fortunately gained, the other boiler was filled, and the steam-engine continued its uninterrupted work.

The total cost of the Thames Tunnel was about £454,000.

The Summit Tunnel, on the Sheffield and Manchester Railway, is the longest yet constructed in this country, although, in point of capacity, it is one of the smallest. It is 5800 yards long, or more than three miles. It is situated near the point of junction of Cheshire, Yorkshire, and Derbyshire. The tunnel was formed by means of five vertical shafts sunk from the surface of the moor, averaging about 600 feet in depth. The tunnel was in progress about six years, no less than 1500 men being at work during a great portion of that time. As the tunnel passes chiefly through rocks of sandstone and millstone

grit, the enormous quantity of 3485 barrels, or upwards of 157 tons of gunpowder, were employed in blasting ; and, owing to the great influx of water, nearly 8,000,000 tons had to be pumped out during the progress of the work.

But of all the projects with which engineers of the present day surprise us, the most wonderful is undoubtedly the tunnel through the heart of Mount Cenis, the Alpine barrier between France and Italy. Everyone knows the story of the passage of the Alps by Hannibal in the old Roman times, and again by Napoleon in our own, both which events are regarded as marvels of daring and persistent endurance. But to pierce through the heart of Mont Cenis, a distance of more than seven and a half English miles, under circumstances which might well have been supposed to present insuperable engineering difficulties, is an achievement before which those of Hannibal and Napoleon sink into insignificance. Our space will not permit us to detail the apparatus and contrivance by which it was effected. Many were tried, and some were very curious. At length the preparatory work was accomplished and the tunnelling was commenced in November, 1860, three years after the project had been sanctioned by the Sardinian Government. It was estimated that it would take twenty-five years to complete it, but such was the progress made that it was ready for use in about half that time. The expense of the tunnel was borne in equal proportions by Italy and France.

The cost of tunnel-making varies greatly. It is estimated that those formed for the old canals were less than £4 per lineal yard, and that for railways of the ordinary dimensions they vary from £20 per yard in sandstone rock, up to £100 and £160 per yard in very loose ground, which may render it necessary to have brickwork lining of great thickness. The celebrated Thames Tunnel cost about £1200 per yard.

BRIDGES.

Bridges form an important feature in railway architecture ; and some of the most extraordinary engineering works of the present day are of this kind. The number of bridges erected over or under local roads, and for field communications, is surprising. There are no fewer than 160 bridges over, and 110 under, the London and Birmingham line ; on the Dover Railway there are 141 ; and between London and Gosport, on the South-Western line, there are 188 ; making a total of nearly 600 bridges or 287 miles of railway.

One of the most remarkable structures in the country of the kind is the bridge which carries the Great Western line over the Thames at Maidenhead. It is composed of a central pier and two main arches, flanked at either end by four smaller openings, intended for the passage of the water during floods. The main arches are elliptical, 130 feet span, and 24 feet rise. The land-arches are semi-circles of 28 feet diameter. The central pier stands in the middle of the river. The bridge has this peculiarity—it consists of two arches only, and these

are probably the largest, and certainly the flattest, in proportion to their span, yet executed in brick.

There is a kind of bridge on the South Coast Railway which is worthy of notice. It is over the Arun, below Arundel, and is the first of its kind. At this point the company was bound to leave a clear water-way of sixty feet for the passage of shipping, and this had to be accomplished by a contrivance called a *telescope bridge*. The rails, for a length of 144 feet, are laid upon a massive timber platform, strengthened with iron, and trussed by means of rods, extending from its extremities to the top of a strong framework of timber, rising thirty-four feet above the level of the roadway in the middle of the platform, the framework being ornamented so as to appear like an arch. Beneath this central framework and one half of the platform are mounted eighteen wheels, upon which the whole structure may be moved backwards and forwards, so as either to be quite clear of the river, or to project its unsupported half across it, to form a bridge for the passage of the trains. To provide for moving this platform, when it is necessary to open the water-way, a second portion of the railway, sixty-three feet long, is laid upon a moveable platform, which may be pushed aside laterally, while the end of the platform is pushed longitudinally into its place. Two men and a boy are able to open this bridge in about five minutes, the operation being performed by means of toothed wheels and racks wrought by winches.

The Conway *tubular bridge*, which has deservedly attracted much attention, is in reality a rectangular tunnel, or hollow square box, having top, bottom, and sides. Around each end is a great deal of wrought ironwork, for the purpose of giving strength to the whole structure, the work at the top, bottom, and sides having each a separate office to perform. It is this part of the work in which Mr. Stephenson's scientific knowledge is especially displayed. The ironwork above the tube consists of eight square cells or tubes, and has to resist compression; that below the tube consists of six cells, and has to resist tension; and that at the sides has to secure the combined action of the top and bottom. The Conway end of the tube is immovable, being fixed on the pier, and made to rest on two beds of creosoted timber, with intermediate cast-iron bed-plates; but the Chester end is free, so that it may expand by heat and contract by cold, as the tube rests on cast-iron rollers, which give play so as to allow twelve inches of motion. The whole mass weighs 1140 tons.

The successes of our great engineers may encourage all at once to hope and attempt. They have the mind to plan, and the hand to execute; and so have all men, though with different degrees of adaptiveness and different spheres of action. Let, then, past successes in these departments of science and art encourage all to the prosecution of higher aims, and the attainment of permanent and worthy results.

He liveth long who liveth well!

All else is being flung away;

He liveth longest who can tell

Of true things truly done each day.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXXI.—MARINE ANIMALS.—(*Continued.*)

WE now advance another step, and notice shell-fish of another order, and of great variety and singular beauty. Some of them occupy shells of exquisite formation not larger than a pin-head, and a magnifying glass must be used to discern their richness of form and colour. Others again are several feet across, and of considerable weight. Some make their homes in the sand or mud, or even tunnel a way into the hard granite, while others simply attach themselves to the rocks or seaweed.

Everyone is familiar with the cockle, the mussel, and the oyster. Their shells consist of two pieces joined together, and they are hence called bivalves. The hinge that unites these two shells is a far cleverer piece of workmanship than any "patent" hinge that was ever registered. In the fish mentioned the most remarkable thing is this powerful ligament by which the shells are opened and closed readily and perfectly, but in other bivalves there are also teeth and sockets that lock into each other.

The inside of the shells has a most beautiful polish, and it is from this material that pearl buttons, knives, and other similar articles are manufactured. The rough outsides of some of them are also susceptible of a high degree of polish by the application of a chemical fluid, just as the lapidary from a very rough-looking stone will produce a splendid seal.

The cockle is found in the sand. The yellow-looking object sometimes protruding, that has the appearance of a tongue, is its foot, and it is by means of this that it moves from place to place, or buries itself in the sand, which is its natural home. The oyster and the scallop live in deep water, and can only be obtained by the operation of dredging. The scallop is provided with a number of thread-like nerves or feelers which it can put forth at pleasure. At the margin of its shell it has a row of eyes that look down the fluted lines or grooves of the shell as we might look along the tube of a telescope. The scallop can project itself through the water with ease though its method of movement is peculiar. It first gapes widely with its mouth, the edges being often as much as an inch asunder; then it shuts itself up with a sudden jerk, and by this means rises five or six inches. In this manner it tumbles forward "head over heels" great distances. From its gay colour, and its peculiar darting motions, the scallop is called the "butterfly of the sea."

The whelk is a very familiar object of the sea-shore. Its spiral snail-like shell may be picked up on most parts of our coasts. At the base of its body it has a broad muscular disk by which it firmly

attaches itself to the rock. It is armed with a spring tongue by which it gets its living. It lives by preying upon its quiet and honest neighbours, being able by this tongue to effect a breach in the castle of limpet, cockle, or other shell fish, and draw forth its occupant. It seems at first sight unjust that one fish should live upon another, but death in this way is more painless than by age or disease. And, indeed, were it not for this provision, such is the fecundity of most of the denizens of the sea, that the wide ocean would soon be unable to provide a home for them all.

The limpet adheres to the rock by means of the circular disk with which it is provided. It was formerly thought to be quite stationary, and to fasten itself by a kind of glue. Both these ideas have vanished before the light of increased knowledge. It has the power of self-motion, and can move at pleasure. Its method of maintaining its firm hold on the rock is by touching its resting-place all round the edge, and elevating its body in the centre, and thus creating a vacuum. Its hold is very tenacious. If you strike it suddenly before it has received any intimation of danger you may readily knock it off the rock. But if you once touch it, however gently, so as to let it know that an enemy is near, you will probably have to break its shell to pieces before you can remove it. In rocks of a soft nature oval depressions may be found corresponding in outline to the shell of the limpet. These cavities are actually made by these animals who stick to their own resting-places, going away only for food. The food of the limpet is supplied by the plants with which the water abounds. The limpet's tongue is an ingenious piece of mechanism which acts as a saw to detach such fragments of seaweed as are suitable to its taste, and a spoon to convey it to its stomach. The limpet is but a little creature, but it possesses a well-built stone castle to live in, which it is able to carry about with it, so that it is never away from home. Its knife and fork, and spoon too, are always handy and always in good condition. Thus we see how amply in the humblest forms of life Providence cares for the being it has created.

The cuttle-fish has a wonderful organisation. Its mouth is almost like the beak of a bird of prey. It has eight arms or legs, call them which you will, for they serve as both, and enable it to swim, or walk, or attack its prey. These arms are provided with a great number of suckers. Its eyes are bright and very prominent. Its body is soft, but its security from its enemies depends not only on a hard shell, but partly upon the terrible power of its arms, and partly on its being enabled to project a dark inky fluid which darkens the waters and enables it to escape. The sepia used by painters is obtained from this fish. The octopus or devil-fish is the species most familiar to us. Each of its eight arms has two hundred and forty suckers, arranged in double rows. It is very ferocious, and when it attacks its prey escape is almost impossible. At the Brighton Aquarium a few months ago some musical genius undertook to quell this animal by the power of music, which is well

known to have charms to soothe the savage breast. He certainly succeeded by playing on an instrument in making the creature follow him in any direction he pleased, but in the anxiety of the experiment he overwhelmed himself and fell into the tank. The octopus darted at him at once and fastened on him, with its two thousand suckers, and every arm of the animal had to be cut off before the poor man could be delivered. In the Indian and China seas these creatures grow very large, and it is said that they will sometimes pull a boat under water. The sailors dread them exceedingly, and always carry a hatchet to cut off the horrid limbs as they are lifted up the sides of the boat feeling after their prey.

The existence of such a creature may be a proof of wisdom, for its organisation is truly most wonderful; but how can it be a proof of the Divine goodness? Where we cannot understand we may easily believe and trust. God's goodness so plainly appears in every department of Nature that we may well believe that such creatures as the octopus form no exception, if we could fully see their uses. They serve to keep down the population of the sea, which would otherwise be excessive. And if sometimes their attacks are directed against men, why God has given us ample means of self-defence. The caution and foresight and bravery, which dangers develop in human nature, are themselves valuable ends for which scarcely any price would be too high to be paid.

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

X.—THE GREAT POWER OF LITTLE THINGS.

"Little strokes fell great oaks." "Little sparks kindle great flames."

"If every one would mend one, all would soon be mended." "Great weights hang on small wires."



E shall all do well to remember the words of the Lord Jesus, how He said, "Take heed that ye despise not one of these little ones." Yes, even *one* of these little ones is too precious and noble to be despised. But we should beware not only of despising little children, but little virtues and faults, little moments and chances of doing good, little words that may be brimful of power for good or evil, little habits that may strengthen and grow until they become stubborn fetters of vice and misery, little grains of wisdom, which, if treasured up, may enrich us eternally.

"A great victory may be lost by the snapping of a pin in an artillery wheel;" and a great moral victory over sin and Satan may

be lost by one false word, one foolish step, one little darling sin. "Little foxes spoil the vine." The vines may be beautiful, fruitful, and of rare value, but little foxes can spoil them by frequent nibbling, tearing, and scratching the grace and beauty of the vines may be destroyed. The foxes may not seem so vicious and hurtful, those bright eyes, and pure white feet, and sharp noses may give them a pleasant and innocent appearance, but they are real pests, and will soon spoil the richest vines. So that boy, Henry Quick, may be very clever, but his bad temper "spoils" him; that girl, Nellie Fair, may be very pretty, but her conceited looks spoil her. The world is a big place and has much in it that needs mending; "but if every one could mend one, all would soon be mended."

The great power of little things is seen quite as much in doing good as in doing evil. Thank God, that it is so. The Rev. N. Hall recently uttered these words:—"A man had lost his way in a wild moorland region; he was far from his comfortable hotel; he was perishing with the cold, but he saw some blue smoke, and found a little hut. It was not his comfortable home, but he there gained instructions by which he could reach it. He was amongst Alpine snows, and the perilous fog had come on, and he had lost his way. There was a sudden uplifting of the mist and he saw a granite peak yonder, which told him the direction he must take, and so he was saved from the precipice. A fisherman was out fishing, and the darkness of the night had come on he knew not how to reach the little harbour; but there was a lamp at the door of his cottage, and that little light was enough to guide him home. A little pebble might bring down a big Goliath; a little maid might lead a rich and lordly leper to the prophet of Israel and the river of life; and a little tract might save a soul from death and add to the many crowns of Christ."

Some people refrain from doing good because they can do nothing great and startling. He who wants to do great things may die before he has done anything worthy of life. The truest test of sterling worth is often seen in the small and common events of life, not in those which are special and splendid. He that is faithful in that which is least is faithful also in much, and he that is unjust in the least is unjust in much. Little lies are the seeds of great ones, little vices, errors, meannesses are the seeds of great ones. "A drop in the bank of a reservoir is an engineer, it tunnels a way for its fellows, and they, rushing, prepare a way for all behind them. A worm in a ship's plank proves in time worse than a cannon ball."

In the doing of great things men will often excel themselves when necessity strains them, or fame allures them, or the breath of applause fills their sails they will "do exploits." But in the common daily task, the ordinary work, the little opportunities of usefulness, they drop down into utter worthlessness. It may seem a little thing to lay aside the choicest bits of food for ourselves, to select the best place, the best plaything, the best pictures, books, or side of the street, all this may seem trivial and little, but it is the outcome

of hateful selfishness, and mars the peace and beauty of many lives. Selfishness is not a little sin, although it may lead to mean and paltry deeds. How true are the words of Tennyson—

"It is the little rift within the lute
That by-and-by will make the music mute
And ever widening slowly silence all."

The longest life is but a parcel of moments, but these tiny moments have a vital and solemn relation to all eternity. "On what a slender thread hang everlasting things." "The last feather breaks the camel's back," willing, patient, and strong though the camel is. Let that wilful girl who has so long and grievously tried and vexed the patient spirit of her mother remember this; lest, the last feather, the last defiant act or insolent word, may break the noble, tender heart that has loved her with a love so true and unsparing. Let the passionate, hasty man never forget that "little sparks kindle great flames." Let the faint and timid, who often mourn because they are incapable of doing anything daring and heroic; whose arms are too weak to strike a vigorous blow; whose voices too faint to beat their names, or any name, on the "drum of the world's ear," let all such remember that "it is not always the strongest strokes that make the sweetest music." A gentle touch, a subdued strain, may speak to our hearts with a celestial voice. It is not alone from the massive oak, or the mighty ocean, or the "stretched out heavens," that useful lessons may be learned. Jesus once said and is still saying, "Consider the lilies of the field." He said suffer the little ones to come unto Me, and He taught us that our Heavenly Father watched over the falling sparrow.

The *New York Christian Union* publishes the following sweet and simple lines, to which we ask the special attention of those who "despise the day of small things":—

"ONLY A FLOWER.

"Only a rosebud, telling
Its story of love and youth;
Only an ivy, clinging
With the steadfast grasp of truth.

Only a lily, repeating
The Master's blessed Word;
Only a daisy, uplifting
Its golden heart to God.

Only a pansy, perplexing
Our minds with its human air;
Only a violet, bending
Its head in silent prayer.

Only a wind-flower, dying
When its frail young life is done;
Only an amaranth, pointing
To the land 'beyond the sun;'

Fair in its passing beauty,
 Spotless and pure in heart,
 Knowing its God-given duty,
 Filling its humble part.
 It teaches its simple lesson
 In the dark or the shining hour,
 While we in our pride and blindness
 Say, lightly, 'tis only a flower."

"A little rope may hang a big thief." "A little key may unlock a golden chest full of precious treasure." It is not quantity, but quality that determines worth. A penny is much bigger than a sovereign; but only a simpleton or baby would prefer the former. A mountain said to a squirrel, "Oh, you little sprig, what can you do?" The squirrel replied, "You are certainly very big, you can carry a mighty forest on your back; but I can crack a nut, and that is what you can't do." A Scotchman left his native land that he might make his home in one of the British colonies. He took with him a thistle, planted it, and it grew and spread year after year; in that colony now there are countless thistles. A poor man, a cobbler, made up his mind to go to India to preach the everlasting Gospel, and print God's Holy Word in the languages of India. With almost infinite pains he prepared one copy of the Bible, then another and another, and now they are sown broadcast over that vast country. The children in our Sunday schools and homes are giving and begging on behalf of the Mission cause. Their offerings may seem but "mites," but, as the Scotch proverb says, "mony littles mak a mickle." And all these tiny drops of kindness, labour, and prayer certainly form a noble river of Christian influence on the banks of which "trees of the Lord full of sap" are daily growing.

"Only a drop in a bucket,
 But every drop will tell;
 The bucket will soon be empty
 Without the store in the well.
 Only a poor little penny,
 It was all I had to give;
 But as pennies make shillings
 It may help some one to live.
 Only a few little bits of ribbon
 And some toys that were not new;
 They made a sick child happy,
 And they made me happy too.
 A word now and then of comfort
 That costs me little to say,
 But the poor man died happy,
 And it helped him on his way.
 Only some outworn garments,
 They were all I had to spare,
 But they will help to clothe the needy;
 And the poor are everywhere.
 God liveth a cheerful giver,
 Though the gift be poor and small.
 What doth He think of His children
 When they never give at all?"

DAISY BANK
OR, SISTER ELLEN'S MINISTRY.

By J. CAPES STORY.

CHAPTER XII.—HARRY AT SEA.

HARRY, as he read and thought about the sea, Harry Walton had dwelt upon the charm and poetry of a seafaring life, he had already discovered that the reality was not quite the same as a holiday sail upon Lake Windermere.

It is only doing him justice, however, to say that his anticipations were somewhat nearer to the fact; while at the same time he would probably have confessed himself that his anticipations were but very faintly in accord with his actual experiences.

The ship on which he found employment was called the *Mariner*, a good tight craft of which any seaman might well be proud. On board the *Mariner* Harry Walton, dressed in blue shirt and canvas trousers, a strap about his waist, and a sou'-wester upon his head, was hardly to be recognised as the gentlemanly youth we have seen at Daisy Bank. It was he nevertheless. In the fore-part of the ship was a covered space allotted for the accommodations of the crew, which differed widely from the comfortable room which Harry called his own at home. It was a mere hole, cumbered with chains, coils of rope, sailors' chests and bags, and having on its sides a number of rough berths or sleeping places for the men. The crew was as various a set as could well be brought together. There was variety in age, of course, and about equal variety in nationality. Of Englishmen there were only a few, of Irishmen not a few, several Italians and Greeks, a Swede, an American, and a negro.

Their language was as mixed as themselves, there being, however, sufficient English to serve as an international bond of communication among them. The coarseness of the majority of these men could scarcely be distinguished from brutality, and their mode of life low in the extreme. Chewing, spitting, drinking, swearing, singing rollicking and often obscene songs, quarrelling and fighting, such was the life of the crew. Harry could not but feel degraded in being shut up to such companionship, and had he not been sustained by great firmness of purpose, his first sight of these men would have sent him home.

Nor was Harry's work on board the *Mariner* such as to exalt his idea of a sailor's life. He had to begin by making himself the general servant of the men, fetching water, and carrying victuals from the cook's galley to the fore-castle, scrubbing decks, coiling ropes, and holding himself ready to answer every call; in the midst of all this drudgery trying to acquire a knowledge of the various details of seamanship, and as well-nigh every separate rope and spar on a ship

has its own name and use, he found it required all his diligence to master the various points of his craft.

His shipmates could not but notice that Harry was a well-bred youth, who evidently had been accustomed to a very different life. And as Harry was careful to tell them nothing of himself beyond the barest generalities, of course they were free to make any guesses they pleased.

"I think nothing o' the young dandy," said one, soon after the voyage began. "He's some clerk or apprentice that's run away from his master, I'll be bound."

"Eh, eh!" said another, "and had his hand in the till once too often, who knows?"

"Hoots, you lubbers!" said the boatswain, a kind-hearted man, who felt disposed to befriend Harry. "What mean ye taking the lad's character away in that sneaking style? He's a king to all the lot of you: there isn't a man among you that's fit to clean his shoes. Let the lad alone; he's as honest as the light, any man may see."

It had so happened that this was the only man in the crew to whom Harry had been drawn, and in whom he placed the slightest confidence. With that natural instinct which somehow makes us open our hearts to the good as the flower opens its petals to the sun, Harry had turned to this rough old man as the only human refuge he could find on board the ship, and fortunately the refuge had not failed. Robert Drew, or Rob Drew as he was mostly called, was a real bit of moral salt among this otherwise very corrupt set of men. But even Rob's influence did not save Harry from many an annoyance.

One day the men were engaged tarring ropes, an operation which, however necessary, can seldom be considered pleasant. Harry was ordered to assist in the work. Now Harry's soft white hands had already been not a little soiled and hardened by his new employment, but this was the first time he had been required to handle the nasty stuff, which sticks so tenaciously to whatever it touches. Harry had turned up his sleeves and tied an old bag before him for an apron, and was beginning to do the work as well as he knew how. But he naturally felt some dislike to the business, which his face and manner did not fail to show. He handled the brush and the ropes in a gingerly fashion, "as though they would bite him." It was no small amusement to the men to watch Harry during this operation. They winked and nodded at each other, cracking their coarse jokes all the while. Harry took it all good-naturedly, until at length a great bulking Irishman noticed that Harry stood upon a piece of sail-cloth while he bent over the large bowl of tar. The Irishman gave a sign to the men, and then, seizing the piece of sail-cloth, he forcibly withdrew it from under Harry's feet, causing him to be thrown forward with hands and arms into the bowl, the warm black tar being splashed up into Harry's face, and neck, and hair, marring his countenance with stains which many weeks' scrubbing could hardly remove. Harry

was immediately roused to great wrath. He wiped his face and arms as well as he could with his apron, and then, with clenched fist, he flew like a terrier at the Irishman who had done the deed, inflicting in a few moments such a chastisement as that cowardly fellow did not forget during the remainder of the voyage, and establishing for himself among the men a character for "pluck," which certainly served him in good stead for some time afterwards. The laugh which was to have been at Harry was all expended upon the native of the Emerald Isle, who never again ventured to play a joke upon this fierce youth, as to him he certainly appeared.

"Ah, ah!" said the boatswain, "perhaps you'll let the lad alone now; there's nought that will touch such lubbers as you but a sound thrashing, and you've got it. You'll mind his teeth another time, I guess."

CHAPTER XIII.—THE NEGLECTED PARCEL.

It was growing late on an October night when the good ship *Mariner* was cleaving her way through the wide ocean, being upon her voyage to a port in Australia. From the day she cast off her moorings in one of the London docks the voyage had been prosperous. Clear sunny skies; a sea reflecting the light and glory from above, flowing in gentle wavelets, and breaking in pleasant rippling music against the prow of the ship; breezes which filled the sails, and sent the ship along at a merry rate. Sometimes the *Mariner* passed another ship, heaved to, and spoke a friendly word. "What ship is that? Where from? Whither bound?" Such the questions asked. Again she would descry a sail too far off to speak to, which looked like a feather or a flock of light upon the distant wave. At another time all alone upon the ocean; in every direction of the compass a vast expanse of dancing, heaving, rolling waters, with not a sign of company, and the *Mariner* appearing like a shadow flitting across the waves.

It was growing late, we have said, on this October night, and the captain and experienced sailors on board the ship looked anxiously at one another and at the sky and sea. There were significant indications of a sudden change in the weather. Low and ragged clouds went scudding across the sky, driven by a wind which hourly increased in strength. The sea began to answer to the changed mood of the sky. Its surface wore a threatening frown. Orders were given to shorten sail, and the sailors ran up the rigging like monkeys up a tree, and there began the folding and tying down of sails, and a general effort to make all "taut" and ready for a storm. Harry was now to see the wonders of the deep. He did his best to assist in carrying out orders, but his mind was all the while occupied with strange thoughts and fearful apprehensions. He traced and retraced that short period of his history which had elapsed since he left the door of his father's house. He recalled the feeling of

determination which at that moment filled his heart, and which led him to say, "There, I've got away, they shall hear of me no more." He dwelt upon the fact that hitherto he had kept the resolve, although two or three times he had been able to send a letter home. He thought of the anxiety which he had inflicted upon those who loved him, and of the fact that even now they knew nothing of their absent one. For a moment he said to himself, "I have served my father right;" but his conscience seemed to answer, "But even if that were true, what of your mother and your sister Ellen, and the rest?"

And then he seemed to see distinctly, first the gentle face of his mother standing at the window and looking wistfully out into the dark, as though she hoped to see him appear. And afterwards the figure of sister Ellen kneeling by the side of her bed in her own room, and praying, praying—oh, so long!—for her brother far away. And then—it was but the fancy of a moment—that figure seemed no longer kneeling by the bed at home, but standing on that very deck, placing a hand upon his arm, and looking anxiously into his face as it said to him, "Brother, I must follow you wherever you go."

All this dreaming was but the work of a moment or two. The captain was all the time shouting loudly, and the men, Harry with them, were running hastily to do his commands. And now the winds came roaring round the ship with the force of a hurricane, making the stout masts to creak and bend, and tearing about the rigging with a shrill noise which seemed to the sailors like the cruel laugh of the storm-fiends. Immense waves came breaking against the sides of the ship, making every plank to tremble, and sometimes sweeping across the deck in great volumes which threatened to sweep every man and thing away. The anxiety was increased by the darkness which prevailed. Up went the ship upon the crest of the billows, and down she went into the hollows of the sea; now lifted, now thrown, now stunned by the force of a wave and seeming about to capsize, again righting herself only to have the same repeated again and again.

It was an awful night; no wonder that they wished for the dawn. But when the dawn came, it only showed them their danger more distinctly, and seemed to do nothing to alleviate it.

For a little time many of the crew were panic-stricken, and they seemed disposed to abandon all effort to preserve the ship; but the captain and officers were men of another sort, and they toiled on.

The severity of the storm continued until another night set in, and during this time no one slept. When at length it began to moderate, Harry was among the first to be sent away to rest. There was now hope of safety. He took off his clothes drenched through and through with the salt water, put on dry things, and then lay down, but he could not sleep. The creaking of the timbers, the beating of the waves, the rolling of the ship, the howl of the wind, the impression of the awful scenes he had just witnessed, together with the thought of those at home which had never left him, made

sleep impossible. He arose and went to his chest. He drew forth a parcel given him by Ellen on the day of his departure. It contained a Bible, as he had been told, but not having been in a mood to read that book since he left home, he had left the parcel unopened. He thought he would look at it now, only look at it; he was not quite disposed to read the book, the events of the last few hours had removed him from home almost by the distance between life and death. The sight of Ellen's present might help to assure and soothe his troubled mind.

As soon as he removed the paper wrapper and opened the book (a beautiful copy of the Scriptures bought with Ellen's pocket-money), there fell from between the covers a letter which Ellen had placed there. Harry was startled for a moment, then he picked it up, and read it by the light of the oil lamp.

"Daisy Bank,
"18—.

"MY DEAR BROTHER,

"Perhaps this letter will first meet your eye when you are miles away from your home, and all who love and care for you. If so, may my assurance of deep affection for you and trust in you be of more value to you, my absent brother.

"I write with the hope that in the future, when perhaps you are beset with difficulties and temptations, you may know that your sister is ever thinking of you and praying for you. I do not wish to blame you for the course you are taking, though I could have wished that father had given a freer consent to your going.

"While you think of your intensity of longing and purpose, you must also think of his bitter disappointment, and if you feel disposed to wander away from us, never hearing of or seeing us, think of the anguish such a silence will bring upon all who love you. Let me entreat you, my dear brother, if, when you read this, you are far away in some region unknown to us, to take the first opportunity of letting us know of your welfare.

"If you cannot do this, let me assure you of my constant thought of you. Scarcely an hour of the day will pass without your sister Ellen thinking of you, and longing—oh, so much!—to know of her absent brother.

"I fear that you will meet with many things from which your nature will recoil, much to discourage and disgust you; but you did not take this step without counting the cost. Doubtless you will find things much worse than you expected (you see, I have read something of a sailor's life since I knew of your inclination that way). Well, if things are at the worst, I know you have a brave, noble heart, I know you went to sea with a firm purpose, and underlying all my fears and heart-achings for you is the conviction that in the end you will do well, though you may for a time and in some measure fall into temptation.

"I feel sure that some day we shall all have cause to be proud of

you, and I even have hope that you may become a sort of sailor missionary. Oh, dear Harry, you will perhaps smile at your foolish sister's hopes and dreams—well, who knows? Perhaps when they are realised we shall smile together. Meanwhile let your sister's love serve to cheer and strengthen you in every good thing; and let me remind you of another, higher love and care. Always remember, dear brother, no matter where you may be, that you have a Father in heaven who sees and knows all—that you are His child; and if I would do so much for you when I have the power, what will He not do?

“I know He is able to keep you from the evil surrounding you, He can strengthen you in every good resolve, and He can make use of you for His own purposes. Will you let Him? Will you try to be a blessing to those around you and to us here? You can have but little idea how much mother's happiness depends upon you. I shall often see her looking out most anxiously for news of you. I shall know by the expression of her face when she is thinking of her absent boy. Again let me beg of you to write to us, for your own sake, as well as for hers and mine. I know you will feel the happier for doing what is *right*.”

“Good-bye, my precious brother.

“Your anxious, loving sister,

“ELLEN.”

TEMPERANCE TESTIMONIES.

MR. W. RATHBONE, M.P. for Liverpool, speaking the other day at a meeting of the members of the Young Men's Temperance Association, said:—“When I was a lad of sixteen, about to go to an office, my father strongly advised me to abstain from the use of stimulants. I took his advice, and rarely touched anything but water, for I found that I could do a great deal more work, and do it with a great deal more pleasure to myself and a great deal better, by simply taking water than by the use of stimulants. Now I am in my sixtieth year, and I find I can still do a great deal more work without the use of stimulants than with it. Sometimes when my strength has been overtaxed, and at one time when my health broke down, I was strongly recommended to take stimulants for a time as medicine. I tried them, and I confess that even as medicine I found them generally to fail. I returned to my old practice, and found myself a great deal better for it. Therefore I can from my own experience strongly advise young men that it is a very great mistake to suppose they will ever be stronger, happier, or in any way better for the use of stimulants.”

At a meeting of the Congregational Total Abstinence Society, held some time ago in Leicester, Mr. E. S. Ellis, Chairman of the Midland Railway, who was the first to address the meeting, said,

that as they visited the town they would see that there were two asylums for lunatics, a very large workhouse, and two gaols, and if any questions were asked respecting the inmates there, it would be found that most of them owed their position to the use of intoxicating drinks. He had not lived an inactive life in his time, and he was sure he could not have done what he had if he had not banished from his table all alcoholic drink, not offering it to his children, his guests, or his servants. There were spent annually £150,000,000 in intoxicating drinks, while only one-third of that amount sufficed to convey the whole passenger and mineral traffic in the kingdom.

PRAYER FOR SUNDAY SCHOOLS.

IN 1872 the Committee of the Sunday School Union issued an appeal for universal prayer to be made on given days for Sunday schools. The appeal was so readily responded to, that it has since been repeated year by year. The time hitherto selected for this devout work is again drawing near. The Committee inform us that they have conferred with brethren of kindred institutions, and it is thought desirable that the third Sunday in the month of October of each year, together with the following day, should be the days thus set apart to this sacred purpose. No doubt all our schools will receive circulars giving them this information, and also offering counsel as to the method in which the services of these days may be most advantageously arranged, and no words, we are sure, are needed from us to induce them to concur in the arrangements and piously carry them out. To our personal knowledge these services in past years have been promotive of great spiritual good among both scholars and teachers. May they this year be attended with showers of blessing to all our schools!

"DUTY FIRST AND PLEASURE AFTERWARDS."



GENTLEMAN had a little pet-dog that always came the moment it was called. One day this gentleman thought he would put the little dog's obedience to the test; so he told his servant to put a plate of meat on the floor for him. The servant did so, and the little dog came running to the plate, for he was very hungry.

But just as soon as the poor thing was thinking what a fine treat it was going to have, and was about to help himself to the meat, his master called him away.

The little dog heard the call, and looked wistfully at the meat. The meat was nice and fresh from the butcher's shop, and certainly

very tempting to a hungry dog. But the little creature knew that the first thing was to obey his master. He therefore turned from the plate of meat without touching it, and ran to see what was wanted, wagging his tail so pleasantly that it just meant a smile.

The little dog, I think, was deservedly a favourite; and it would be well if all little folks followed his example, doing what they know to be their duty before seeking their own gratification.

More than once I have heard a mother call her little girl, who has answered, "Yes, mamma," but never gone. She was busy dressing her doll, perhaps, or undressing it for bed, or just finishing her lessons and did not wish to leave them, or putting the last touch to the picture she had been painting and wanted to complete it.

When little folks do this, they are pleasing themselves instead of obeying mamma, and cannot expect a blessing from God.

"Duty first and pleasure afterwards," children, that is the way to be truly happy.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

OCTOBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
6 Israel's Promise.....	Joshua xxiv. 19—33...	ver. 24.
13 The Promise Broken.....	Judges ii. 1—16	Isa. i. 2.
20 The Call of Gideon.....	Judges vi. 11-18, 36-40	Jer. i. 7.
27 Gideon's Army.....	Judges vii. 1-6, 16-28	Zeeh. iv. 6.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
6 Improvement of Privileges	Luke xiii. 22—35.....	ver. 24.
13 The Gospel Feast	Luke xiv. 12—24 ...	ver. 15.
20 The Prodigal Son	Luke xv. 11—32	ver. 18.
27 The Rich Man and Lazarus	Luke xvi. 19—31.....	Prov. xiv. 32.

NOVEMBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
8 The Death of Samson....	Judges xvi. 21—31...	Micah vii. 8.
10 Ruth and Naomi.....	Ruth i. 1—9, 16—22..	ver. 16.
17 A Praying Mother.....	1 Sam. i. 9-18, 21-28..	ver. 28.
24 The Child Samuel.....	1 Samuel iii. 1—18...	Prov. viii. 17.

AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
3	The Ten Lepers..... Luke xvii. 11—22.....	Ps. li. 10.
10	Acceptable Prayer..... Luke xviii. 1—17.....	ver. 18.
17	Zaccheus, the Publican... Luke xix. 1—10.....	ver. 10.
24	Impending Judgment . . . Luke xxi. 5—21.....	xix. 42.

BIBLE QUESTIONS.

1. Who would not gratify her husband's pride?
2. Who pined about a wish he thought denied?
3. And who to satisfy that wish was slain?
4. Who pondered in the field at eventide?
5. Where did the warrior Jephthah long abide?
6. And we are bidden wisdom's wealth to gain?
In these initials find the worth
Of all the short-lived joys of earth.

MEMOIR.

ELIZABETH YOUNG, PORTWOOD, STOCKPORT.

ELIZABETH YOUNG was a very wise and good child. She died on the 20th July last, was only twelve years old, but in many respects she was much older than her years. Her own mother died when she was about two years old. But her stepmother is a pious woman and always took as deep an interest in her welfare, both temporal and spiritual, as if she had been her own child. Yet it seemed as though she needed but little human help to enable her to become a true Christian. The Spirit of God worked powerfully upon the child's mind even at the early age of three or four years. When so young it was her habit to take all her little troubles and difficulties to God in prayer. Being a very delicate child, she mixed but little with other children, escaped therefore many temptations, and the good influences which came upon her worked with less interruption. For several years before her death she was very fond of reading, but it was only good books that she would read. Few at her age knew so much of the Bible; she had a special love for and acquaintance with the Book of Psalms. She was a very great sufferer for about five months before her death, but she was remarkably patient under it all. She at times felt all but certain that she should not recover. At such times she would say, "I will wait as long as it shall please Jesus." The only signs of impatience, if they may even be called such, were in such words as these:—"Oh, I am tired. How long will it be before I go to Jesus?" "Not long," we answered. "By-and-by you will be at rest." "When is by-and-by?" she inquired. "Oh, I should like to go just now." A day or two before she died she again put the inquiry to us, "How long will it be before I shall die?" We answered, "Perhaps in a day or two," for we saw it was nearly over. She instantly burst into tears, saying, "I shall not go

to heaven ; I have been so restless " (by this little incident we see the tenderness of her conscience). But as we reminded her of the precious promises she soon stayed her mind on God and was perfectly at peace again.

Her father is what the world calls an upright, respectable man. Lizzie not only prayed for him, but tried her best to persuade him to give his heart to God. One day, some months before her death, she said, "I believe I shall have to die to bring my father nearer to God." Oh, that the child's wish and prayer may be answered ! I must omit a number of interesting things she said and did during the last few months of her life. But one thing I can't pass by. Before the family retired to rest on Friday night, July 19th, she said, "Ma, I shall die to-night ; they are coming for me ; you must sit up with me." Her mother thought she was rambling in her mind. But soon after midnight she peacefully passed away.

Jesus says, "Suffer little children to come unto Me, and forbid them not, for of such is the kingdom of heaven." How many of you young people who read this page will please and honour Jesus by giving Him your hearts to-day ? Jesus wants you. E. A.

Poetry.

THE SCHOOL-BOY.

We bought him a box for his books and things,
And a cricket bag for his bat ;
And he looked the brightest and best of kings
Under his new straw hat.

We handed him into the railway train,
With a troop of his young compeers ;
And we made as though it were dust and rain
Were filling our eyes with tears.

We looked in his innocent face to see
The sign of a sorrowful heart,
But he only shouldered his bat with glee
And wondered when they would start.

'Twas not that he loved not as heretofore,
For the boy was tender and kind ;
But his was a world that was all before,
And ours was a world behind.

'Twas not that his fluttering heart was cold,
For the child was loyal and true,
And the parents love the love that is old,
And children the love that is new.

And we came to know that love is a flower
Which only groweth down ;
And we scarcely spoke for the space of an hour
As we drove back through the town.



VISITING THE SICK.

VISITING THE SICK.



THE subject of our picture this month has particular charms for us. What do we see in the picture? Well, we are introduced into a room which is evidently not the home of affluence. Everything about it bespeaks poverty and want—and more, it is not the home of health. Some one is extended on the bed of sickness, and it is clear is without those little comforts which do so much to alleviate the pain of sickness. It is not for these things the picture charms us. Were there nothing more in it, only sadness would be caused by looking at it. But there is another figure in the picture beside the poor afflicted person, whose desolate condition awakens our sympathy; and it is that figure which so much pleases us. Why? First of all, it is the figure of a pleasant pretty girl. We have not been great travellers, visiting many lands beside our own, but we think wherever we might go, we should find no prettier sight in any country than an English maiden in her teens. The girl in the picture, lovely as she is in herself, is still lovelier in our eyes for being where she is, and for the purpose which has brought her there. Some girls spoil their beauty by being giddy and trifling in their spirit and deportment. They are “careless daughters.” The young person in the picture does not belong to that class. She is thoughtful and kind, and benevolent, or she would not be in that sick room. It is plain she has gone there on an errand of mercy. Look at that basket on her arm! You may be sure it is not empty, or, at any rate, it was not when she first entered that humble dwelling. No, there was in it some nice dainty things for her sick friend. To that friend she has come as a ministering angel. But there is more than the basket to look at. What is that book in her hand? And what is she doing with it? Perhaps she has been reading to the sick one, lending the beauty of her voice to the precious and comforting words of the blessed Jesus. But now she is singing to cheer the sad heart of the afflicted. In imagination listen to her. How soft and sweet is the melody of her voice! Its enchanting strains and the holy truths she utters soothe and strengthen her for whom the service is

performed. We could suppose many things about this lovely maiden which might be true. She is the member of a happy home, surrounded there with abundance and luxury. She has been highly educated, taught accomplishments, and has at her command all that can minister to the gratification of her refined and cultured taste. But in her unselfishness she thinks of those less favoured than herself; tries to supply their need out of her abundance, and uses her accomplishments to gladden those who are weary and heavy laden through sickness and want. God bless these maidens, and may they be multiplied amongst us !

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 143.

From BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
October 28th, 187—.

MY DEAR CHARLIE,—

I suppose you have not yet had much leisure or inclination for letter-writing. Do not think I am grumbling about your silence. I am only anxious to know your future prospects, and to hear if you are at all recovered from the shock of your great trouble. I heard from father a few days ago that you had not definitely settled your affairs.

We had a capital meeting on Thursday evening at our Band of Hope. We got Dr. Tasker to consent to take the chair for that occasion only. Mr. Macpherson made a very humorous but convincing speech on the fallacy of strong drinks being of use either in health or disease. Ted Instone gave us a temperance melody with a chorus in which we all joined. This is the second time Ted has sung by himself at our meetings. He has a fair voice and uncommonly good musical taste. I gave a recitation, and so did one or two other fellows whom you don't know. We have now got eighteen members, although two who first joined us have broken their pledges.

I suppose you have not felt equal to attending your Band of Hope since your father died. They will miss you very much if you should ultimately have to give it up.

Do not hurry to write to me. I know you will write as soon as

you feel well enough. My friend Ted sends his heartiest sympathy.

I remain, my dear Charlie, yours affectionately.

BEN BARLOW.

Letter No. 144.

From CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,
November 8th, 187—.

MY DEAR BEN,—

I am thankful for your consideration with regard to my long silence. It is a month to-day since dear father died, and I seem to have been ever since in a constant whirl of anxiety and worry. Poor mother has been so fearfully out up by the calamity that almost everything has devolved upon me. And of course, although a travelling clerk came down for a week, there was the post-bag to be made up every night and the shop to attend to.

I have at last decided to leave Messrs. Carson's and succeed father at the post-office. It has been a hard struggle. My prospects in my situation were far better than anything I am likely to get in my father's place. You see if I could have stopped about five years longer I should then be getting enough to keep mother and myself in a nice little cottage, and each year I should get more. Indeed young Mr. Carson offered to give me an extra advance at once as an inducement for me to remain with the firm.

If the officials would have allowed mother to keep the post-office herself, that, together with the stationery business and my wages, would have kept us nicely. But you see there are the letters to go to Hammerthorpe every night, and the authorities declined to alter their arrangements.

I at once saw either my situation or the business must be given up. And though in the long run my situation would pay the best, for the present the post-office and my father's business offered the best income.

I thought over it anxiously for a long time, and prayed for guidance to decide for the best. Everything seemed to urge me not to lose my place at Carson's: my future prospects, my own inclinations, the wish of young Mr. Carson, the advice of my best friends, including your father, and dear mother's consent. But if I let the post-office and the business go, I knew mother would have to help earn her living by needlework. I could not bear the thought of that, for father had solemnly charged me to support her. Some of our kind friends wanted to help us by raising a subscription, but I told them that must not be. My father would not like us to be dependent on charity as long as I was able to earn our bread.

So at last I felt it my duty to give up my situation at the factory and accept that of postmaster. When I announced my determination

to mother she said it was what she had all along hoped I would do, though she had been careful not to influence my decision. She would not have liked to leave the house she has lived in ever since she was married. I think, too, that your father and other friends see that I have done the only thing I could under the circumstances. And although I sometimes cannot help regretting the loss of my prospects for the dull routine of a country post-office, I always feel certain I have acted for the best.

I have been twice to the Band of Hope since father died. We had the room filled on both occasions. I have of course resigned my office now. I shall go next Wednesday to deliver up the books. I am very sorry to leave, for I was much attached to the president and many of the members. I must see if I can establish one in our village before the winter is gone.

Please write often, and bear with me if I don't reply so promptly as you could wish. Your letters always cheer me. Thank your friend Instone for his kind sympathy. Mother sends her regards to you. I am yours very truly,

CHARLIE THORNTON.

Letter No. 145.

FROM BOB TO BEN BARLOW.

Woodbourne,

November 10th, 187—.

DEAR MASTER BEN,—

You'll maybe be pleased to know my affairs are now settled so far that I have more money than I know what to do with. My sister (think of that for me!) wants me to go and live on the property and be a gentleman farmer. A pretty thing that would be! Why, some time or other, when I had got my broadcloth on, if I thought I should like a drive, and the stable-boy was just out of the way, I should set about to rub my horse down and put him in the gig myself! A fine gentleman I should make!

It has almost drove me off my matters bothering about what I should do, but for the present I have given it up, like I used to do the riddles. Mr. Instone and your respected father have agreed that I shall stop here to wait on Master Ernie as long as he stops, as a sort of Little Henry and his Bearer.

Mr. Jones says he thinks he could get me regular employment in a big band at Hammerthorpe; but I should have to be travelling about all the while to various places with the band, and I shouldn't like that. I don't think I should care to be thumping a big drum *every* day either. I like it now and then very much, but I might get tired if I did it reglar.

Master Ernie is getting on bravely. He walks quite comfortably now, and nearly like other children.

With kind regards to yourself and Master Instone, I remain your obedient servant,

BOB.

Letter No. 146.

From BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
November 11th, 187—.

MY DEAR CHARLIE,—

Your long letter came duly to hand, and was most interesting, though I cannot say whether it made me feel more sad or more happy. A little of both, I think. I was proud to think of your strong principle and your unselfish sacrifice of your future prospects for present advantages. I am afraid there are not many of us schoolfellows who would have been equal to the task.

But I could not help regretting that your duty should have called you to leave the factory, where your rapid progress and the friendship of young Mr. Carson seemed to promise so much in the future. But I will not talk of this. You have made your decision, and I think we must all agree you have decided dutifully, and so any thought about what chances you have missed is only likely to call up useless regrets.

It is my wish to cheer you, and the best thing I can say is something the Doctor said in his last Scripture lesson about taking up our crosses. He said no one ever lost anything by sacrificing for what they thought to be right. In many cases, he said, the very thing they voluntarily gave up came back in ways never expected, but if that particular thing did *not* come, its absence was more than made up for in peace of mind and other blessings. In this sense, he said, "he that loseth his life shall save it." I thought this would just do for one of your despondent turns, if you have any.

What a queer world this is! On the one hand you have had to give up a promising situation because your father left you and your mother unprovided for. On the other, our Bob, who was as happy as could be, has been brought almost to the asylum by the discovery that his grandfather has left him a snug fortune. I believe his is a worse case than yours. He is not only compelled to give up a situation he was fond of, but there is no clear line of duty such as you had to direct his future proceedings.

Give my kind regards to your mother; I hope she is somewhat resigned to her loss. Ted sends all good wishes, and I remain, yours ever truly,

BEN BARLOW.

Letter No. 147.

From CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,
November 16th, 187—.

MY DEAR BEN,—

Thanks for your letter; it cheered me up wonderfully. I shall not soon forget the Doctor's remarks. As for your Bob, I really feel

sorry for him. If it were not for little Instone taking so much of his attention, he would be very miserable. He has talked his affairs over with me several times. He once asked me as a personal favour to accept a loan of one or two hundred pounds to invest in our business. Of course I laughed at the proposal.

What do you think I received last night? It really seems as if everyone tries to show us how kind they can be. I went to the Band of Hope to deliver the books and papers to the newly-appointed secretary. To my surprise, after opening the meeting, instead of going on in the usual way, Mr. Carson began to speak of the late secretary and his services. Even my vanity won't permit me to repeat all the kind and complimentary things he said, but he finished up by offering me a beautiful inkstand, which had been subscribed for by the members.

I was so much taken by surprise that I couldn't respond to the presentation. I tried to say a few words, but a big lump came in my throat, and if I had not sat down I should have blubbered outright. Mr. Carson relieved me of the difficulty in a very nice speech, and the meeting shortly afterwards broke up.

The inkstand is really beautiful. It is of polished walnut, with three cut-glass ink-bottles and a drawer for stationery. In the front there is a little silver plate let in, bearing the inscription:—"Presented to Charles Thornton by his friends, the members of the Tinbury Band of Hope," and the date. You see I have quite early begun to be rewarded for doing the right. I might have continued at Carson's and been secretary of the Band of Hope for ten years or more without ever knowing I was held in such esteem and regard by its members.

I have quite settled down to my duties now. I have not nearly so much to do as I had at the office, so I think I shall occupy my leisure in useful study. I have not yet decided what to take up; I am fond of algebra and mathematics, but neither of those, nor any other studies, seem to be useful in a post-office.

Mother joins me in kind regards to yourself and your friend.
Yours most affectionately, CHARLES THORNTON.

Letter No. 148.

From DR. BARLOW to BEN BARLOW.

The Laurels, Woodbourne,
November 23rd, 187—.

DEAR BEN,—

Well, I think we have at last settled Bob. For a wonder, he himself; Mr. Instone, his lawyer; and I, who consider myself his guardian, have agreed.

Mr. Instone wanted Bob to settle on his own estate, but he would have been lonely there. The grand folks, his neighbours, would have made fun of his simple manners; and he would have been

swindled right and left, though he is shrewd enough about anything he understands.

It seemed to me, if Bob was to be a farmer, he had better be one here. He knows the sort of farming required for this land; he understands stock; he is respected by all, and would take the position his money qualifies him to assume sooner here than anywhere else.

I broached the subject to Bob. He snapped at the idea eagerly. From several conversations with him I gathered that he seemed to prefer the occupation of a stock farmer. I knew he was as good a judge of horseflesh as any dealer, and I had heard his knowledge of cows spoken highly of by farmers.

Just as we were thinking over the matter, "The Lowlands" was offered for sale. Perhaps you remember it. It is that rich pastureland lying between the common and Crop Hall farm. There are several grass meadows, a few acres of grain land, and a snug farmhouse. I wrote to Mr. Instone giving full particulars, and Bob's opinion and mine. He came up next day, went with Bob over the property, made a bid for it, and secured it before the day fixed for the sale.

So Robert Audsley's address will soon be:—The Lowlands, near Woodbourne. The good fellow has arranged for poor Widow Watson and her daughter to keep house for him, and attend to the dairy and the poultry. The poor woman was as bad off as could be, and was in continual dread of having to go to the workhouse. Young Sam Ball will help on the farm and sleep in the house. Bob has already begun to furnish in a quiet homely fashion, and next week he will take possession. Some of the stock on the farm he has bought. The others will go to Hammerthorpe cattle sale on Saturday.

Bob is like a new man now that he has a definite and a congenial occupation before him. I feel sure he will do well and be comfortable.

Mr. Instone is coming for Ernie on Monday. With love from us all, your affectionate father,

OLIVER BARLOW.

PAPERS FOR THOUGHTFUL BOYS.

By THOS. STONELEY.

XXII.—MACHINERY AND APPARATUS.—STEAMERS.



RAVELLING by river or sea would naturally suggest itself to all except the inhabitants of regions in the heart of a large continent. The very floating of trunks of trees on the waters would give a hint to the first shipwrights, while a little study of the movements of a fish, combined with the peculiar shape of the fish itself, would fur-

nish something like a pattern for the prow, the bows, the quarter, the run, the stern, the oars, and the rudder of a floating vessel. A single plank to which the navigator olings, like the surface swimmers of some of the Sandwich Islands; a hollowed trunk of a fallen tree, beams or planks lashed together to form a raft, the pottery floats of Egypt, consisting of earthen vessels covered with a flooring of bulrushes; planks of acanthus-wood, lapped over and pegged like the slates of a house-roof, with papyrus leaves, to form a sheathing and a shelter; long poles tied together with whale sinews, and covered with sea-dog skins—all, and many others, were primitive forms of boat, and most of them could probably still be found among the ruder tribes of the earth. It is difficult to understand how our ancestors' ships could have rendered the service required of them. In Cæsar's time they were light boats, with keel and ribs of wood joined together with wicker-work, the latter being covered over with stout leather. They were capable of holding some four persons, were not decked, and had a small sail on a single mast, a paddle over the quarter for the rudder, and a set of oars. In these frail barks the ancient Britons crossed to France and to Ireland, and coasted along their own shores.

Speaking generally, the vessels of the Anglo-Saxons and of the Danes were only large, deep, open boats, none of them exceeding fifty tons burden; their prows and stems considerably elevated, and usually ornamented with effigies of men, birds, and beasts. To a single mast, supported by a few shrouds, a large square sail was suspended, and formed the means of propulsion when the wind was fair; but the sailors depended chiefly on oars, by means of which they also steered. The helmsman kept one hand on the steering-paddle and held the sheet of the sail in the other; the sail was bent on a sort of yard, which was hoisted by means of halyards secured at the foot of the mast. In boats of this kind, which accommodated at no time more than sixty men, the expeditions of sea-kings were made and voyages completed which would now-a-days be considered risky, unless made in well-formed steamers.

King Alfred improved the British ship in order to let it cope with the Danish "œscs," or war vessels. The ships he built were full twice as long as the others; some had sixty oars and some had more; they were both swifter and steadier, and also higher than the others. They were shapen neither like the Frisian nor the Danish, but so, as it seemed to him, that they would be most efficient, and they seem to have been a sort of galley. Improvements were made subsequently by other princes, and at the time of the Norman Conquest our ancestors' ships were very respectable things, quite capable of keeping the sea and of holding their own against the ships of other nations. The Norman Conqueror's vessels were inferior in build and accommodation to those of the English, but then most of them were built expressly for the invasion service, and were probably not specimens of the best Norman shipbuilding. They were large, open boats, with high stem

and stern, driven by sails and oars, had high gunwales, round which the shields of the soldiers were hung, forming an additional bulwark, and held from twenty to sixty men.

For many years the Normans were content with such ships as they had, but about the time of Richard Cœur de Lion (A.D. 1189), vessels of much larger size, and of various classes, began to be built. The ships of the navy, if such an expression may be used, consisted of large galleys, afterwards called galliasses or galiones, small war boats and busses, which were large vessels with bluff bows and bulging sides, and were chiefly used for the conveyance of troops, stores, and merchandise. About the time of Edward III. English war-vessels had undergone a considerable change, so as to resemble rather a modern ship than an ancient galley. Ships of this period averaged 200 tons burden and carried a crew of sixty-five men besides soldiers. Ships and shipping remained in pretty much the same state after the reign of Edward until Henry VII. came to the throne. With Henry, who built the *Great Harry*, began the modern system of shipbuilding, and our ancestors' ships went out of date.

RISE OF STEAM NAVIGATION.

Unquestionably the greatest of all improvements in navigation was the application of *steam-power* as a substitute for sails. Oars are of use only so long as there are hands available to wield them; sails are available only so long as there is a breeze to fill them; but a steam-engine is never tired, and works on whether there be wind or not. It enables our ships to dash across the trackless deep in spite of opposing elements—

“Against wind, against tide,
Steadying with upright keel,”

in a fraction of the time and with a fraction of the cost and peril of the old mode of naval locomotion. Attempts were made to move boats by revolving paddles long before the steam-engine was invented. The ancient Egyptians are believed to have navigated boats on the Nile by causing paddle-wheels to be rotated by oxen; and wheel-boats, more or less similar, were used by the Romans and the Chinese. Prince Rupert worked a wheel-boat on the Thames by the aid of a horse; and Captain Thomas Savery effected the same thing by rotating a wheel through the medium of manual labour.

With regard to the invention of steam navigation it is now pretty well agreed that it cannot be solely claimed by any one person. Towards the close of last century a number of ingenious minds were in travail with the scheme. The Marquis de Jouffroy in France, and Filch and Rumsey in America, were successful in experiments of its feasibility; but it is to the efforts of Miller and Symington in Scotland, followed up by those of Fulton and Bell, that we are chiefly indebted for the practical development of the project. Having a natural bent for mechanical contrivances and abundance of money and leisure

to indulge his tastes, Mr. Miller, of Dalswinton, in Dumfriesshire, somewhere about the year 1785, was full of schemes for driving ships by means of paddle-wheels. All he aimed at originally was to turn the wheels by the power of men and horses; and this he managed to do successfully enough. A young man named Taylor, who was tutor to Mr. Miller's boys, is said to have suggested the application of a small steam-engine to supersede the labour of a human wheel-turner. Mr. Miller, entering into the plan, employed William Symington, a mining-engineer at the Wanlockhead lead mines, to make the engine. Accordingly an engine was built under Symington's direction and superintendence on the plan of the model which he himself had invented. It was sent to Dalswinton and put together in October, 1788. The engine, in a strong oak frame, was placed in the one half of a double pleasure-boat, the boiler occupying the other half, and the paddle-wheels being fixed in the middle. At length all the preparations were finished, and on the 14th November Mr. Miller had the delight of seeing the vessel gliding over the mimic waves of the lake near his house at the rate of five miles an hour. The experiment was next tried on a large scale with a canal boat on the Forth and Clyde Canal. Mr. Miller employed Symington to plan a twelve horse-power engine suitable for it, to be made by the Carron Iron Company. It was so far successful that the steam-boat tugged a heavy load on the canal at a speed of seven miles an hour. This was in 1789. Nothing further was done by the three ingenious men conjointly. Symington could not afford to indulge in further efforts at his own expense, but he found a patron in Lord Dundas, who commissioned him to construct a steam-tug for dragging canal-boats. In 1802 a stout serviceable tug was built, and a series of experiments entered upon to test her efficiency, which cost upwards of £3000. In the face of a strong wind, that no other vessel could make head against, it pushed gallantly on at the rate of three or four miles an hour, drawing two laden barges, each of seventy-two tons burden. By itself the tug could do six miles an hour without any great strain. The Forth and Clyde Canal Company made some objections, however, about the banks of the canal being injured, and the tug fell into disuse. It served an important end, though, in giving a basis for succeeding operations, and must be considered the parent of our modern steam-craft. We must now speak of what was achieved by Fulton the American. In 1807 he made a new steamer, with engines by Boulton and Watt. This vessel, the *Clermont*, astonished every one by making a voyage up the Hudson from New York to Albany, a distance of 150 miles, at the rate of five miles an hour. It was the first voyage of such a length ever made by steam-power. The Albany people had never seen a steamer; and the new-comer, seen in semi-darkness, was described as "a monster moving on the water, defying the winds and tides, and breathing flames and smoke." Fulton did not live long to enjoy his triumphs. He died in 1815, having been actively engaged in promoting steam navigation to his last hours.

The honour which in America attached to Fulton as the man who first brought the steamboat into use in our own country fell (in a somewhat less degree) to Henry Bell. When Fulton visited Symington's invention, with a view of procuring some ideas from it, Bell appears to have accompanied him, and to have afterwards corresponded with him on the subject. This led him to set about putting his opinions on steam navigation into a practical shape. Accordingly in 1811, Bell having procured the necessary funds had a steamboat built of twenty-five tons and four-horse power. He named it the *Comet*. It began to run regularly between Glasgow and Helensburgh in January, 1812, and continued to ply successfully during the summer of that year. In the second year she went a tour round the three kingdoms. In 1820 the *Comet* was lost between Glasgow and Fort William, and by this loss and the burning of another ship Bell lost £3000, and sank into poverty and neglect. An annuity was secured to him by a few of his friends to keep him from starving, but his enterprise and perseverance were but ill rewarded. He died in 1830, in the sixty-fourth year of his age.

OCEAN STEAMERS.

The principle of steam navigation having been discovered to the world its progress was a natural consequence. At first, content with plying along rivers and quiet bays, steamers by-and-by ventured out upon the open sea. Through the courage and enterprise of Mr. David Napier, of Glasgow, steam communication was established between Holyhead and Dublin, Liverpool and Greenock, and various other parts.

At length, in 1836, the startling project was set on of superseding the far-famed New York and Liverpool packet-ships by a fleet of steam-ships. Many learned folk on both sides of the Atlantic shook their heads doubtfully at the scheme, but the experiment was to be made, and on the 4th April, 1838, the *Sirius*, of 700 tons and 320 horse-power, sailed from Cork for the far West. Four days after the *Great Western* followed in her wake from Bristol. On the 23rd April the *Sirius* swept into the New York harbour amidst the cheers of the multitude, the ringing of bells, and the firing of salutes. The excitement reached its climax when some few hours later the *Great Western* came to anchor alongside of her rival.

Nearly forty years have passed since then, and the marvel of 1838 has become a mere everyday affair. In the interval between 1812 and 1877 the number of steamers in the United Kingdom has increased from one to nearly three thousand, and the ocean-going steamer of 1877 is nearly six times the length of the *Comet*, while the difference in tonnage is still greater.

FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXXII.—MARINE ANIMALS.—(Continued.)



N speaking of the last or highest order of marine animals we shall find selection difficult, inasmuch as the different kinds are so numerous and flourish so abundantly in almost every part of the world. They exhibit great variety of form; all varieties, however, subserving the purpose of a swift and easy movement through the water.

Animals that live on earth are furnished with fur or hair, by which they are defended from the inclemencies of the weather. The wisdom of God is fertile in new designs, and is never embarrassed by the stubbornness of the materials with which it works. We may expect, therefore, that the finny denizens of the deep will have all their wants suitably and effectually provided for. On touching a fish we notice a kind of sticky matter that moistens the entire body. We next observe the covering of scales protecting every part of the animal, and yet so perfectly flexible as to readily admit of the most rapid and graceful movements. And then, before we come to the flesh, we find a kind of fatty or oily substance that extends from one extremity to the other. Thus, by its solidity and by its antipathy to water, the light and impenetrable garment which the fish wears is the most appropriate robe to fit him for the element in which he lives.

The colours of fishes are of great variety. Some of them present but a dull appearance, but many of them glow with all the changing hues of the rainbow. Tints of gold, silver, copper, blue, green, and purple, in changing brightness and splendour, are often seen. It is probable the fishes themselves delight in these gorgeous colours, and that they serve some useful end. Whether this is so or not it is given to us to note that all the objects created by a bountiful Providence are endowed with great beauty.

The figure of the fish tapering a little at the head, and then from the thickest part at the neck growing more and more slender to the tail, is manifestly the one most adapted for the purpose of moving through the water. The chief organ of locomotion is the tail. It is extremely flexible, and by means of strong muscles is of considerable strength. It moves quickly from right to left, and from left to right, and by this alternate action the body is impelled forward in the same manner that a boat is propelled by means of an oar placed at the stern and worked rapidly from one side to the other. The fins, which are mainly intended to steady and balance the fish, contribute also in some degree to repel the water, and put the body in motion; they also cause it to stop when they are rigidly extended and cease to move to and fro. It is by means of the fins that the fish preserves itself in perfect equipoise. Deprived of them the back, which is

heavier than the underpart, would no longer be kept in proper balance, and would slant on one side or become entirely inverted. This is what actually happens with dead fish, which float on the surface of the water on their backs or their sides.

In order that the fish may rise in the water or descend to greater depths it is supplied with an air-bladder, which is capable of contraction or expansion by means of internal muscles. Owing to this arrangement the fish can swim at any depth below the surface it may choose. Otherwise it must of necessity keep the same level in the water. That the fish should know exactly to what extent to contract or expand this bladder so as to alter its specific gravity may at first sight seem strange. But we must remember that we ourselves know how to leap and jump without knowing the muscles it is necessary to swell or relax—to breathe without understanding the structure of our lungs—and to feel by means of our nerves a variety of sensations without knowing whether we have nerves or not.

The gills of fish are a kind of lungs which are opened for the reception of air, and the mechanism of which is so ingenious that the air may be extracted from the water without any of the latter entering. The eyes are adapted to the dense fluid in which fishes live. They are flat, so as not to be exposed to danger, and large, so as to admit as much light as possible.

It is no small proof of the beneficence of God that the fishes that are wholesome and palatable are extremely prolific, while those whose flesh is disagreeable, or whose enormous size renders them dangerous to others, bring forth very few young. Thus herrings come in immense shoals, while whales and sharks are comparatively rare. The fisherman reaps a harvest which he has never sown, and a harvest which varies little in abundance all the year round. He goes to his toil like the Israelites went to gather up the manna, and every day's diligence and exertion are rewarded by a net more or less full of valuable spoil.

Codfish are very abundant in some parts of the sea, especially on the coasts of Newfoundland. The number of men employed in the fisheries is prodigious. We have before remarked that some animals, as the ox and the sheep, are so useful to man in various respects that not a particle is wasted. This is the case with the codfish, for every part is useful and valuable. The flesh is excellent for eating either fresh or preserved. The liver gives forth the oil that is so valuable a medicine for persons of delicate constitution. The bladder supplies isinglass; and such parts of the fish as cannot be used for other purposes are employed as bait by the fishermen.

The whale is the largest of fish, and though not used as food, except to a small extent, by the hardy Greenlanders, supplies us with whalebone, oil, and other useful materials. The whale-fishers use in this dangerous calling the harpoon. A harpoon attached to a long line is so skilfully thrown that it buries itself in the flesh of the

whale. The fisherman then either holds on to the line, drawing it in or letting it out as the movements of the whale direct him, and then, when the animal is weakened by the loss of blood, getting to close quarters and despatching it with a hatchet; or else attaching the line to a large buoy leaves the whale to die from weakness and exhaustion. The whale is a fish that cannot exist for long under water without coming to the surface to breathe. Air does not exist in water in sufficient quantity to supply the needs of his enormous organisation. Accordingly there is, as we might expect from a beneficent Providence, a special adaptation in his structure. Instead of the tail being vertical, as in all other fishes, it is horizontal, and thus, by a few powerful strokes, he easily forces himself up to the surface to take the air he needs.

Thus we see everywhere skilful designs—adaptation of means to ends—and a Beneficence ruling the whole that includes in its wide scope both man and all the inferior creatures. Either for the great purposes the ocean serves as the storehouse of fertilising elements for all the land; or having regard to its marvellous vegetable productions, or its myriads of curiously-constructed inhabitants, it is natural we should all have a fondness for the sea, and say, with the poet—

“I love to wander on thy pebbled beach,
Marking the sunlight at the evening hour,
And hearken to the thoughts thy waters teach
Eternity, beneficence, and power.”

DAISY BANK

OR, SISTER ELLEN'S MINISTRY.

By J. CAPES STORY.

CHAPTER XIV.—ONE SUNDAY.



JIMMY JORTIN was not a little surprised when he found his “Christian Worthies” on the floor of the stable, and not upon the shelf where he had left them.

He felt that they had been dishonoured. However, a little reflection convinced him that the “Christian Worthies” themselves would survive the insult, and that it was rather the volume which recorded their virtues about which he ought to grieve. For the book had been thrown with such violence that part of the cover was torn away, and many leaves were hopelessly damaged. Jimmy was both perplexed and distressed. He knew not how to account for the mishap, nor what he could say to the librarian when the book was returned.

Some elderly people are apt to smile at the troubles of youth, or to

consider them impatiently. In comparison with their own larger cares they seem so trifling, so unworthy of serious attention.

"How foolish to make so much of so little!" they say, when they see the child whose heart is ready to burst over a broken toy, or the girl who weeps for hours because she has been slighted or slandered by her schoolmate, or the boy who is smarting under a similar sense of injury because his kite has been torn and rendered useless by a ruthless companion.

But those who retain the memory of their early days will know that these things are not small to the youthful mind. They are often crises in their history, not easily passed through and not soon forgotten.

Jimmy felt that someone had done him a serious wrong, but who the offender was he was unwilling to decide. Of course, he thought, his master, being almost the only other person who visited the stable, must know something about it, and yet, wicked as he knew him to be, he could hardly believe him guilty of wanton mischief such as this. Then, as he looked at the book and turned over its soiled leaves, he half resolved to get over the difficulty by one of those cowardly and unworthy shifts which suggest themselves too readily at such times; he thought he would not return it at all, and that he would not go to the school again.

Fortunately it occurred to Jimmy that he might mention the matter to Mr. Norlan, a friend who was not disposed to make light of his trouble.

"Well, I'm afraid it's your mester that's done it," said Mr. Norlan; "for though you've told us of some queer tricks that the donkey is up to, I don't think he'd be likely to disturb the book, and it seems to me that it's 'tween one and t'other. And I'm afraid he's done it on purpose, too. Hasn't he said anything to you?"

"No, nothin'."

"Well, I guess you'll be hearing something by-and-by. But you must not let it grieve you over-much, lad. You see, you've had no buffetings of evil to speak of yet, and maybe this is a beginning."

Jimmy looked at his friend and asked what they were.

"Well, 'oppositions of the world,' the preachers call them. And if that makes it no clearer, let us say the thumps and knocks which men with evil hearts and evil lives give to those who are trying to live in a better way, and the hindrances which they try to put in the path of these. If you, Jimmy, mean to take to the Christian way you'll have many a box and blow to bear, so make up your mind to it, lad. And sometimes you'll wonder what it's all for, because it seems so strange that folks should try to hamper and annoy those who are only seeking to live right. But, bless you, you mustn't be so much astonished, for it's one of the commonest things in the world. Some bad folk are not so bad but that they can like to see good folk, and can honour them for their goodness too. But other some can't bear to look upon them that's better than themselves, and they'll

do all they can to trip them up and drag them down, and, if possible, make them as wicked as themselves. You may as well be told, if you haven't found it out for yourself already, that there's a deal of meanness among folk; nasty, paltry spite and ill-will, people doing wrong because they seem to like to do it, and are even proud to do, who 'glory in their shame.'"

"But, Mr. Norlan, why should my mester not like me to read a good book of that sort?"

"Ah, why? I should like to know. And the fact is, there isn't a good answer that can be given; only I fancy you'll find out that he doesn't. But keep your head straight up, lad, and never fear. The good book says, 'He will never suffer the righteous to be moved.'"

Poor Jimmy had only a hazy notion of what these words meant; only he gathered from them that God was on the side of the good, and he was conscious that at least he was trying to be one of these.

He went back to his home and to his work resolved to say nothing to his master about the book, and when he returned it to the librarian the next Sunday he honestly pointed out the damage and was allowed to pay for it out of his scanty supply of pocket-money.

Still, Jimmy was aware that there was a difference in his relations to his master—a difference not yet openly expressed, though certainly felt by both the one and the other. People have often to get along together under most awkward and unfavourable conditions. It is surprising how they manage to do it, but they succeed all the same. It is an uncomfortable time, no doubt, when the wronged and the wrong-doer are thrown together in daily intercourse. But one had rather be the former than the latter. The sense of injury, bitter though it is, is easier to bear than the stings of a bad conscience.

Happily, Jimmy was not required to silently carry his grievance for long. Mr. Dan. Lowthorpe had resolved what he would do with this lad who seemed to be presuming that Sunday was his own. On one of the Saturdays about this time Jimmy had been employed along with Bosker and his master in selling herrings.

Early in the day they began their business, passing along street after street, the patient animal stopping with his load again and again, while Jimmy took turns with his master in crying, "Fresh herrin'! fresh herrin'! two a penny, herrin'! Now's yer time for herrin'! sound and cheap!"

The purchase was rather a heavy one, but the fish was fresh and fine, and they found for it a ready sale, among the poor people of the crowded courts and lanes, who were thankful to get so good a dinner at so small a cost.

Still, when evening was come there was yet one basket of fish to sell. Now, it was Mr. Lowthorpe's custom on a Saturday night to deal with remainders of this kind in a liberal fashion, for, when necessary, he made a reduction in price, so as to have as little as possible left on his hands over Sunday.

Jimmy, knowing what was usual, said, "There's that other basket. Shall I fetch it out, mester?"

"No," said Mr. Lowthorpe; "I'll sell no more to-night."

Jimmy thought this strange, but as he knew better than to reason with his master he let it pass. The explanation came the next morning. It was Sunday, and Jimmy was up early, so that soon after eight o'clock he had done his work in the stable, had washed himself and got his breakfast, and was now dressing himself in his Sunday clothes.

"Jimmy!" shouted a voice from the bottom of the stairs. It was Mr. Lowthorpe's, who usually spent Sunday morning in bed, but, to Jimmy's surprise, was now up.

"Yes," answered Jimmy.

"Come thee down here."

"Yes, in a minnit, mester."

"Come thee down just now."

"All right, mester;" and Jimmy left off his dressing, and came downstairs. As soon as he appeared Mr. Lowthorpe scanned the lad from head to foot.

"What's thee gowking thyself in that fashion for?" demanded Mr. Lowthorpe, at the same time seizing a nice white collar which Jimmy had bought the previous night and almost wringing it off his neck.

"Stop, mester, what are yer doin'?" demanded Jimmy, in his turn.

"What's thee gowking thyself in that fashion for, I want to know?" again asked Mr. Lowthorpe.

"'Cos I'm goin' out," said Jimmy.

"Where art thee goin'?"

"I'm goin' to Sunday school."

"Sunday school! Then I tell thee thee's goin' somewhear else."

"Wot d'ye yer-mean, mester?"

"I mean this. D'ye see them herrin'?" pointing to the basket left over from the previous day.

"Yes."

"Then yer mun set to work and sell them herrin' afore you go anywhear else to-day."

Jimmy now saw at once the meaning of his master's conduct. He greatly feared his wrath, for well enough he knew the lengths to which it would lead him; but he did not hesitate about the answer.

"I can't do that," said Jimmy.

"Yer can't do that? Wot for, can't yer?"

"'Cos it's Sunday."

And here Mr. Lowthorpe swore fiercely at the lad, and said—

"Sunday! Wot's Sunday to such as thee and me?"

"It's the day of rest," answered Jimmy, timidly, for he still more feared his master's rage.

"Day of rest, yer young varmint! dost think I keep thee for

rest? I know whear thee's got that notion. But I tell thee, thee's got to work when I want thee, Sunday or no Sunday. So away with them herrin' and sell 'em ivery one." And so saying, Mr. Lowthorpe put down the basket close to Jimmy's feet, and stood waiting to see whether he would obey without further objection.

But Jimmy said, "No, mester, I can't do it any more. I'll try my best to please yer on weak-days, and I'll do wot must be done on Sundays, but I can't sell any more. Yer've hed me, body and sowl, iver sin' I wer' a young'un, and yer've done nawt to get me a bit o' taichin', and I've found a few friends now as'll help me to larn a bit o' summat, and I tell yer I'm determined to——"

But Jimmy was not allowed to continue. With a great blow upon the head his hard-hearted master felled him to the ground, saying, as he stooped over him in his wrath: "Wot dost mean, a talkin' to me like that? Hevn't I gin yer vittles, an' togs, an' shelter, sin' ye wer' a bairn, yer ungrateful dog! An' is this to be the end of it all? An' yer'll begin to tell me wot yer'll do an' wot yer won't do, will yer?" Kicking the lad with his heavy boot as he said the words.

"That's wot's come o' goin' to a Sunday school without axing my leave to go. Now then I'll put it to yer fiat. Either yer go an' sell them herrin' to day, or yer leave this place. Choose which yer will. Work, or no work; a home or no home."

Though Jimmy was much hurt by the blows and kicks he had received, fortunately his injuries were not of a serious kind. He was able, therefore, to gather himself up in a moment or two. But as he arose his master saw his face under a new aspect. It quite flashed with indignation. The sense of the wrong which had been done him literally burned in his eyes and in his whole expression.

"There, mester," said Jimmy, in a most unusual tone; "yer've done yer best an' yer worst. I've half a mind to show yer what I can do i' th' same line. Maybe I could mak' yer smart a bit. But I'll try to hod mysel' in. But yer a big, seukin' coward to kick me i' that way. An' as for yer takkin' me when a little un, so yer did; and yer've gotten more nor yer share o' work out o' me iver sin'. An' now I'll tell yer plain, I'll niver sell another herrin' for yer while I live, if I be of the mind I am to-day. An' as yer bid me choose, so I will, mester; an' I'll choose to leave yer. An' I'll hev a deal more sorer i' leavin' Bosker than I'll hev i' leavin' you. An', leastways, I shall know I've done my best for both o' ye."

Cruelty and cowardice get on badly before a little downright honesty and plain speaking. Mr. Dan. Lowthorpe could no longer stand before the uprisen spirit of his lad.

Like a whipped dog he slunk away, growling as he went. As soon as opening-time permitted, he found a seat in a small public-house near at hand, and tried to quench his bad thoughts and feelings in the publican's beer and the company of the publican's boisterous customers.

Jimmy knew that when his master was once within the doors of the "public," he would not be likely to come out again until closing time. And as there was no one left in the house but a deaf woman who acted as housekeeper, and who was quite unaware of what had occurred, he did not hurry to get away. He silently gathered together his clothes and other small items of property, and then spent most of the afternoon in the stable, telling the donkey all his troubles, as he had long been accustomed to do. It was indeed a dreary Sunday. Not until after nine o'clock at night could he bring himself to say good-bye to Bosker; and then with his bundle he went forth not knowing whither. He had not a single relation in all that great town—not a house anywhere to which he felt he had any claim to go. Dim recollections arose in his mind of an unhappy childhood, and of once wandering the streets in this manner before. He walked along almost unconsciously directing his way towards the only refuge of which he could think, the good chapel-keeper's house. But when he arrived the blinds were down and the lights out. After a busy day Mr. Norlan and his daughter Miriam had retired early to rest. Jimmy could not disturb them. But the chapel and school premises were just by, and Jimmy thought he dare venture to trespass in the school. He knew the building well, for he sometimes helped Mr. Norlan to sweep the rooms.

Finding a window which fortunately for him had been left unfastened, he lifted the lower part and crept in. The class-room, from which he had been absent that day for the first time since he entered the school, afforded him the shelter he required.

With the seat for a bed, his bundle for a pillow, and a heavy old overcoat for covering, he succeeded, after a long time of wakefulness, in falling asleep.

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

BY ENOCH GRATTON.

XL—GOODNESS AND BADNESS.

"Virtue is the true nobility." "Do good and then do it again." "A good name keeps its lustre in the dark." "He who swims in sin will sink in sorrow."

THE above proverbs have been plucked from fields in which many others relating to the same subject are growing. I say *growing*, for really as time rolls on they seem to increase in depth, and wisdom, and force. Does not the first of these proverbs contain a most significant truth? By the side of virtue, what are titles, ranks, and laurels? Compared with real goodness, what is gold,

or royal blood, or widespread fame? It is true that men do not always believe in the surpassing worth of virtue. It is not every-one who believes that "a good name is rather to be chosen than great riches," but it is true notwithstanding. Men admire the genius of the poet who says so simply and grandly—

"Howe'er it be, it seems to me
'Tis only noble to be good;
Kind hearts are more than coronets,
And simple faith than Norman blood,"

yet often act as if they did not believe his words, though they are true.

It is, I believe, a Welsh proverb in which we are told "to do good and do it again." Our goodness is not to be a stunted, standstill thing; it should be constant and progressive. We are not to live on past reputation or labours. We are to love, and pity, and help, and forgive, and then do it again and again. "I have taken a standard," said a soldier. His captain was silent. "Captain, captain, I have taken a standard from the enemy." Still his captain was silent. The soldier impatiently said, "Captain, I have taken a standard." The captain then quietly said, "Go and take another." So let us all do good and do it again.

Your good deeds may be unknown, or when known unappreciated. You may seem to "waste your sweetness on the desert air," but it is not wasted if it be real. Amid the most cold and barren spots, beneath the blackest clouds, yea, in the deepest gloom at midnight, it shines on. Yes, "a good name keeps its lustre in the dark;" in sickness, in poverty, in loneliness, amid slander and persecution it retains a dimless glory. I should be much pleased if I could induce my readers to search the Bible through and through to see what it says about "good things." It speaks of "good tidings," "good manners," "a good part," "good words," "a good way," "a good man," and it assures us that the Lord shall be with the good.

Real goodness has at the very heart of it truthfulness. Without this it is mere tinsel and veneer. Robertson, of Brighton, used to say that the first thing needful is that we should be true, and the second was that we should be true, and the third was that we should be true. There are too many shams, and puffs, and unrealities in our midst, but let us ever be intensely, thoroughly true.

"Think truly, and thy thought
Shall the world's famine feed;
Speak truly, and thy word
Shall be a fruitful seed;
Live truly, and thy life shall be
A great and noble creed."

Better far that we should speak the simple truth, even if it be plain and prosy, than that we serve up our stories with the sauce of exaggeration. Some people are under the temptation to make

everything spiey and striking, and so they slide into the habit of lying. "A lie hath no feet." "Liars should have good memories." "Lying lips are an abomination unto the Lord." How cheerfully men pay homage to the man

"Whose armour is his honest thought,
And simple truth his only shield."

Somebody once tried to excuse a lie to Dr. Johnson, saying, "You must not believe more than half of what he says." "Aye," replied the Doctor, "but which half?" The young especially will do well to remember how grand a thing it is to be true, sterling, and pure, not simply in actual speech, but in thought, purpose, spirit. Even the truth may be told for a false and vicious end.

"And a truth that's told with a bad intent
Beats all the lies you can invent."

"Whatever you are, be brave, boys!
The liar's a coward and slave, boys!
Though clever at ruses,
And sharp at excuses,
He's a sneaking and pitiful knave, boys!"

"Whatever you are, be frank, boys!
'Tis better than money and rank, boys!
Still cleave to the right,
Be lovers of light,
Be open, above-board, and frank, boys!"

"Whatever you are, be kind, boys!
Be gentle in manners and mind, boys!
The man gentle in mien,
Words and temper, I ween,
Is the gentleman truly refined, boys!"

"But, whatever you are, be true, boys!
Be visible through and through, boys!
Leave to others the shamming,
The 'scheming' and 'cramming,'
In fan and in earnest, be true, boys!"

It is not enough to admire virtue and piety in others; we ourselves must be virtuous. It is a poor thing to rebuke badness in others if we are not resolutely striving to be good. "The friar preached against stealing while he had a stolen goose under his cloak." The raven said to the crow, "Stand aside, black coat." It is not enough to say "be good," or "I will be good." "Who can bring a clean thing out of an unclean thing?" Only one, that is God. He who tries in his own strength to make himself good is like one engaged "in washing the crow white." Every good gift and every perfect gift is from above, and cometh down from the Father of Lights, with whom is no variableness, neither shadow of turning. Let us earnestly pray for grace to be good, and for power and wisdom to do good.

"Virtue never grows old."

"Virtue may be blamed, but it never can be shamed."

"Virtue which parleys is near a surrender."

"Virtue is its own reward."

OPERATION ON A MONKEY.

Poor "Joss," the well-known baboon in the collection at the Alexandra Palace, who, in a very docile manner, and without chloroform, bravely submitted, a week or two ago, to the extraction of two teeth by Mr. F. S. Mosely, dentist, was on Saturday afternoon subjected to a further and more serious operation at the hands of the same gentleman. The poor creature had for a long time suffered severely from necrosis of the lower jaw; and while the former operation had considerably relieved his sufferings, it was necessary to extract two more teeth, together with an old fang, and to break away a large piece of the diseased jaw. Chloroform was used, and as this is the first instance in which it is known to have been administered to a monkey, it will be interesting to state that the animal is a rather large individual of his species, probably from 12 to 15 years of age, that the anæsthetic was 4 minutes 37 seconds in producing perfect unconscionness, and that the revival took place in about ten minutes from that time, during which the operation had been successfully performed by Mr. Mosely. Poor Joss soon recovered his usual condition, and after cooling his face against a window-pane for a few minutes, quietly rejoined his companions, apparently little the worse for his mutilated jaw, and much relieved by the treatment.

COURTESY.

LITTLE girls, do you ever think about the meaning of words? This word now, *courtesy*, has something about it which girls and women ought to care for very much indeed. You know that hundreds of years ago in Europe, and in many heathen countries now, women are not much better than slaves. In China, for instance, when company comes to a house, the parents present the boys very proudly, but they send the girls out of sight as fast as possible. They don't want anybody to know that they have a little daughter in their home.

Gradually, in the Middle Ages, woman came up from a state of barbarism, and the clergy and poets together helped her to win her proper place. The lady of the castle kept the keys and presided at the feasts, wore beautiful robes of stuffs called samite and camelot, and gave medicine to the sick. She learned surgery, too, and when the soldiers and knights came home from battle wounded and faint, she knew how to set the broken bones and bind up the bruised parts. So everybody treated her politely, and the sort of manners which then

came to be popular in place of the old roughness and rudeness took the general name of *courtesy*.

The Bible bids us to be *courteous*. Do you want to know the highest and loveliest style of courtesy which you can practise at home, at school, and in the street? It is all wrapped up in one golden phrase, "In honour preferring one another." Suppose you try to live with those words for your motto, say for a whole week to come.

BRUIN'S STRATEGY.



BUT the mother seal builds her nursery beneath the surface of the ice in such a manner that it can enter it from the water below; here the young seal passes its infancy, and when the returning heat of summer has destroyed its igloo or dwelling, the young seal is old enough to take care of itself; but this mode of lodging its youth beneath the ice is well known to the bear, who, with his keen scent, soon detects its whereabouts, and making a spring, comes down heavily with all its weight on the pool of the igloo, crushes it in, and immediately seizes the young seal with its paws. Here, it might be supposed, the hungry bear at once devours its prey; but no, it is far too wary to do so; it knows full well that where a baby is, there must of necessity be a mother, and that she will be in search of her darling; therefore the bear scrapes away the snow from the seal hole, and holding the young seal by the flippers allows it to flounder about, and when the mother approaches, the bear slyly draws the young seal toward it until the old one is within reach, when he seizes her with the other paw, and thus captures both. Bruin's method of capturing a seal in the water is as follows: He sinks his body beneath the surface of the water, leaving only the head above, which resembles a piece of ice; and when the seal raises its head above the surface, Bruin quietly sinks, and swimming under the seal, seizes it. Thus the poor, stupid seal becomes a victim to misguided confidence.

BIBLE QUESTIONS.

1. What was found at Achmetha?
2. A country in which the Israelites were forbidden to sojourn.
3. The name of a prophetess.
4. The measure ten times greater than an omer.
5. The place where Paul left a sick companion.
6. Whose foot was crushed "against the wall?"
7. What a king said he had done exceedingly.
8. A rock where six hundred men found refuge.
9. What were "cast into the Red Sea?"
10. One of the clean beasts.
11. The weight of a certain crown.

12. A city which was besieged for three years.
13. The name of a mocker.
14. What was brought out of the isles of Chittim?
15. What the Lord said he would send to Babylon.
16. One of the books of the New Testament.

The initials of the answers form an injunction given by Christ.

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

NOVEMBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
3 The Death of Samson.....	Judges xvi. 21—31...	Micah vii. 8.
10 Ruth and Naomi.....	Ruth i. 1—9, 16—22..	ver. 16.
17 A Praying Mother.....	1 Sam. i. 9-18, 21-28..	ver. 28.
24 The Child Samuel.....	1 Samuel iii. 1—18...	Prov. viii. 17.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
3 The Ten Lepers.....	Luke xvii. 11—22.....	Ps. li. 10.
10 Acceptable Prayer.....	Luke xviii. 1—17.....	ver. 13.
17 Zaccheus, the Publican...	Luke xix. 1—10.....	ver. 10.
24 Impending Judgment . .	Luke xxi. 5—21.....	xix. 42.

DECEMBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
1 The Death of Eli.....	1 Samuel iv. 1—18....	Prov. xxix. 15.
8 Samuel the Judge	1 Samuel vii.	Prov. iv. 18.
15 A King desired	1 Samuel viii.	ver. 7.
22 Saul chosen.....	1 Samuel x. 17—27 ...	Prov. viii. 15.
29 Samuel's Parting Words..	1 Samuel xii.	ver. 24.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
1 The Lord's Supper.....	Luke xxii. 7—20.....	1 Cor. xi. 26.
8 The Cross.....	Luke xxiii. 33—49....	Gal. vi. 14.
15 The Walk to Emmaus	Luke xxiv. 18—32 ...	ver. 32.
22 The Saviour's Last Words.	Luke xxiv. 33—53...	Matt. xxviii. 20.
29 Review of the Quarter's Lessons.		

JUVENILE MISSIONARY MEETINGS.

JUVENILE MISSIONARY SOCIETY, MILES PLATTING.—The quarterly meeting of the above Society was held in the chapel on Sunday afternoon, Sept. 15th, when one of our esteemed teachers, Mr. J. B. Valentine, occupied the chair, whose presence produced a genial and homely influence. The report was read by the secretary (Mr. B. Powell), which was somewhat satisfactory. He dwelt particularly on the much-lamented death of the Rev. W. N. Hall on the Chinese Mission since their last meeting, the audience expressing many marks of sympathy as he dilated on the somewhat sudden death of Brother Hall, whose labours had been so abundant, and yet signally blessed, on that station, which must prove to all of us how much he had the evangelisation of that vast people at heart. Oh, that God would raise up many such men as Brother Hall to carry the tidings of salvation to those benighted and superstitious people! The meeting was specially favoured with the presence of Mr. C. T. E. French (native of Africa), who delivered a very telling address, and attributed his education and conversion to the Christian faith mainly to the labours of English missionaries in his native land. He exposed the superstition and ignorance of the Africans in their belief in, and observance of, their strange and false gods, closing with an earnest appeal to the audience to give of their substance for the support of missionaries in foreign lands, he himself standing before them as a living witness to the success of missionary labour. During the afternoon suitable recitations were given, and a number of missionary melodies were sung by the scholars. The choir also favoured the meeting with an anthem—"He shall feed His flock." Collection in the meeting, £1 9s. 7½d. Financial statement for the quarter:—Misses J. Smith, 6s.; M. A. Smith, 4s.; L. Purdey, 3s. 7½d.; Mr. A. Burgess, 16s. 1d.; Master W. H. Mastin, 1s. 3d.; and J. Mastin, 1s. 3d. Total, £3 0s. 10d. Brothers T. Schofield and S. Johnson also took part in the meeting. Thus a very memorable and interesting meeting was brought to a close.—B. POWELL, Sec.

BERRY BROW, HUDDERSFIELD.—We held our Annual Juvenile Missionary Meeting in our chapel on Sunday afternoon, May 12th, 1878. There was a very fair attendance of teachers, scholars, and friends. Our respected minister, the Rev. John James, presided. After singing and prayer the secretary was called on to read the report, and then the chairman opened the meeting with an interesting and instructive address, bearing chiefly on our mission work in China and its results. Short addresses were also delivered by our young friends, Messrs. T. Leonard, H. Gledhill, T. Taylor, and H. Farrand, which were well appreciated by those present. Several recitations on missions were given by the following scholars in a very pleasing manner:—Ann Banks, Sarah A. Crow, Sarah E. Bradley, and Janet Woodhouse. The following is the financial statement for the year:—Collected by Mary E. Dawson, £1 12s. 6d.; Helena Whiteley, £1 10s.; Laura Jessop, 11s.; Sarah E. Bradley, 3s. 7d.; Janet Woodhouse, 3s. 6d.; Subscription from Mr. A. Heeley, 2s.; School mission-box, 3s. 1d.; which with the collection at the meeting, amounting to £1, makes a total of £5 5s. 8d., being £4 0s. 5d. more than last year. We may add that this was one of the best meetings we have ever held, and we hope and trust that the zeal and earnestness which our young friends have displayed in the past will be kept up in the future.

HENRY GLEDHILL, Missionary Secretary.

Memoirs.

ZION SUNDAY SCHOOL, LONGTON.

CHARLES ROGERS was born at Marlborough, Wiltshire, July 16th, 1820. Little is known of his early life save that he attended the Wesleyan Sunday school and evinced a strong and growing love for the same.

On reaching his majority he removed from Wiltshire in search of employment. During his itinerant mission he visited Longton, and finding a few days' employment in the vicinity he resolved on settling awhile. Passing along Commerce Street one day, his attention was arrested by a large and massive structure. So struck was he with Zion Chapel that he promised himself the pleasure of attending on the following Sunday. True to his vow, Brother Rogers was one of the congregation when Sunday came. The Rev. T. Boycott was the preacher, and the word came with power to his heart. He attended Zion Chapel on the succeeding Sunday, when Rev. J. Poxon preached. He was further impressed, and felt some anxiety about salvation. During the week, whilst at work, light broke upon his soul, and he there and then gave himself to Christ. Shortly after his conversion our brother came to reside in the town from an adjacent village; he at once identified himself with the Sunday school. Thus was he brought by the providence of God to the place that had more than twenty-two years of pleasurable and useful service from him. Charles Rogers was devoutly attached to the Sunday school, and was a pattern in respect to regularity and punctuality of attendance. Nothing but an insuperable difficulty, over which he had no control, would keep him from school, and he was never known to be late. Another noticeable feature in our brother was the diligence and care with which he prepared for his work. He was always ready with the appointed lesson for the day. He spared no pains that he might efficiently teach the young men committed to his care; and with what result appeared in the esteem in which he was held by his scholars, and the "happy choice" many of them were induced to make.

In the month of October of last year our brother's health gave way, and it was evident to all who saw him that his active work was now done. For several months he was confined to his room by a heavy affliction, but Divine grace worked in him submission to the will of God. Many precious truths expressive of his state of mind fell from his lips; and to the care of Jesus he finally committed his youthful charge. The summons came, and he was found ready, for on the morning of March 27th, 1878, his happy spirit entered the saints' everlasting rest, aged fifty-eight. "Precious in the sight of the Lord is the death of His saints."

SAMUEL BARNETT.

EMMA MANSELL, the adopted daughter of James and Mary Hibbert, went home to heaven May 10th, 1878, aged fifteen. Also, EMILY WARBLLOW, who for more than twelve years was a scholar in Zion School, sweetly slept herself away to heaven in the twenty-fourth year of her age.

S. B.

Poetry.



MY LITTLE HERO.

EARTH's bravest and truest heroes
Fight with an unseen foe,
And win a victory grander
Than you or I can know.
We little dream of the conflict
Fought in each human soul,
And earth knows not of her heroes
Upon God's Honour Roll.

But one of earth's little heroes
Right proud am I to know,
His name for me is mother,
My name for him is Joe.
At the thought of a ten-year-old hero
My friends have often smiled,
But a battle-field's a battle-field,
In the heart of man or child.

There were plans of mischief brewing ;
I saw, but gave no sign,
For I wanted to test the mettle
In this little knight of mine.
"Of course you must come and help us,
For we all depend on Joe,"
The boys said ; and I waited
For his answer, yes or no.

He stood and thought for a moment ;
I read his heart like a book,
For the battle that he was fighting
Was told in his earnest look.
And then to his merry playmates
Out spoke my loyal knight,
"No, boys, I cannot go with you,
For I know it wouldn't be right."

I was proud of my little hero,
And I prayed by his peaceful bed,
As I gave him his bedtime kisses
And the good-night words were said,
That true to God and his manhood
He might stand in the world's fierce fight,
And shun each unworthy action
Because "it wouldn't be right."



MY LITTLE COTTAGE HOME. (See page 311.)

THE EDITOR TO HIS READERS.



MY DEAR FRIENDS,—How rapidly time flies! I can scarcely realise the fact that I am issuing the *JUVENILE INSTRUCTOR* for the closing month of another year. It seems but a very short time since the year 1878 began, and now it is very near its end. May the review of the year awaken within us no bitter regrets for sins committed, or duties neglected!

As Editor of the *INSTRUCTOR* I have striven to give you another volume with both pleasing and instructive reading, and by the help of kind friends I hope my effort has been successful. The boys which "Ben Barlow's Budget" made you acquainted with a year ago are now grown-up men, and in their several spheres are beginning in a Christian spirit to do the real work of life. The schoolboys who have read with interest the letters of the Budget from month to month—and we know there have been such—will, we trust, when school duties are over, enter upon the duties of their manhood in a similar spirit. The "Footprints of God in Nature," and the "Papers for Thoughtful Boys," have been even more interesting this year than they were the year before; while the "Proverbs of all Lands" have been full of wit and wisdom. We have not had the usual series of Band of Hope Papers, but the cause of temperance has been advocated by the tale of "The Prisoner's Children." This tale we may say is published in a separate volume by the Band of Hope Union. The charming story of "Daisy Bank" I should think has greatly pleased all readers.

Now a word about the coming year, and this obliges me to say a word or two more about the past year. In two things it will be seen I have not carried out the prospectus given twelve months ago. I refer to the "Story of My Child-life" and "The Children's Book-Shelf." The fact is I could not find room for them. I was like a man who collects a considerable amount of goods on the wharf for transit to his customers, and then finds his barge is too small to hold them. This was literally my dilemma. This year I shall try to avoid such a mistake, and therefore my young friends who have inquired about the story of Grandpa's child-life will not I hope be again disappointed. I am happy to say that "Tom Brown" again places his pen at our service, and will try to bring up schoolboys in the way they should

go by a series of papers under the title of "The Philosopher in the Playground." "Daisy Bank" will continue to charm our pages till the story is finished. The writer of "Papers for Thoughtful Boys" will supply a series of "Papers for Thoughtful Girls," which we trust will be read as well by girls who are not thoughtful, if there be such among our young friends. The pen which has so instructed us by tracing out in Nature the footprints of Nature's God will cultivate our taste and enliven our imagination by "Studies of the Poets," a task which we are sure he will fulfil charmingly. Our young friends who take an interest in the "Bible Questions" will be transferred from Uncle John to "Uncle Thomas." I have no doubt that their new uncle will give a fresh interest to this department of the INSTRUCTOR; so they must be on the look-out for his questions and puzzles, and try to win the prizes he will have to bestow.

In every way I shall do my best to make the JUVENILE INSTRUCTOR for 1878 worthy of the patronage of our Sunday schools and those families who wish to furnish proper reading for the children and youth belonging to them. I therefore feel warranted to ask for the kind patronage of all, both young and old. The Magazine can be obtained through any bookseller.

With my annual wish—not the less fervent because it comes annually—that you all may have a cheerful Christmas and a Happy New Year—I am yours very sincerely,

THE EDITOR.

MY LITTLE COTTAGE HOME.

I LOVE my little cottage home ;
'Tis dearer far to me
Than all the splendid halls of state
Where gayest pleasures be.
I envy not the silken robe,
Or costly diadem,
That decks the high-born lady fair—
I want no gaudy gem.
The little, simple, golden pledge
Of wedded love I wear ;
A good, and fond, and faithful heart
Has he who placed it there.

I would not mingle in the crowd
 Where move the wealthy throng,
 For there be many aching hearts
 That worldly crowd among.

* * * * *

And through the leisure evening hour
 We smile, and talk, and sing,
 And fond endearments of the past
 To sweet remembrance bring.

Sometimes we read the pleasing tale,
 Indulge in poet's lore ;
 So much of bliss in cottage walls
 You never saw before.

And when the common cares of life,
 Which all must sometimes feel,
 Steal sadly o'er our aching hearts,
 Love finds some balm to heal.

And when perchance a friendly face
 Comes kindly to our door,
 Our warmest welcome gives them place,
 To share our cottage store.

I would not quit my peaceful home,
 Or my dear Walter's side,
 Through all earth's gayest scenes to roam,
 Or be a monarch's bride.

M. J. GILBERT.

BEN BARLOW'S BUDGET.

By TOM BROWN, Author of "A Year at School," &c., &c.

Letter No. 149.

FROM BEN BARLOW to BOB.

Waterside House, Worcester,
 November 28th, 187—.

MY DEAR OLD BOB,—

I am glad to learn from father that you are not going far from Woodbourne. I know the "Lowlands" well. I have had many a stroll over it. It is a beautiful place, and I remember the house and the farm buildings are all delightful rambling old places. It is just the sort of house they tell about in ghost stories. I should wonder if there are a few tales of ghosts and goblins belonging to some former owner.

However, ghosts or no ghosts, unless Mrs. Watson makes herself very disagreeable, you will often find me over at your place in the holidays. I am quite impatient for the next four weeks to fly over, that I may come and pass my opinion on your stock and such like.

I suppose you will still continue your lessons under Mr. Jones? I think you ought to do so, for you have already made wonderful improvement. Your last letter had scarcely one mistake of spelling in it. Of course you will keep up your connection with the band? I'll be bound Tom Blunt will be running across to practise with you pretty often.

I feel sure you will be much happier at the "Lowlands" than if you had gone to your own place below London. You will be among folks who know and respect you, and you will know all about the best markets to send your live stock to. Don't imagine I am quite disinterested in my congratulations. I should have missed you very much from Woodbourne, though, even if you had gone to the other place, I should most likely have paid you a visit without even waiting for the formality of an invitation.

Ted Instone wishes you had gone to the farm near London, so that he could have had somewhere to visit in the holidays. But I tell him he should not let such selfish considerations influence him!

And now, Bob, I must pull up. Please remember me to all the old schoolboys when you see them. Believe me, yours truly,
BEN BARLOW.

Letter No. 150.

From ERNIE INSTONE to BEN BARLOW.

London, November 29th, 187—.

DEAR MASTER BARLOW,—

You see I have got safe home agen. Pa brought me day befoar yesterday from Woodburn. I am so much better that the raleway ride dident hurt me at all. The nayburs who have seen me are surprised. Brother John says he culdent have believed I was so much improved.

Of corse it isnt so nice hear as it is at Woodburn. The last too days have been so dark and foggy. But yet I am glad to see my old friends, and espheshly as I can play with other childrun a bit now.

I was so glad to find my rabbits were alive and doing well. They are quite big wons now. They have quiet forgotn me while I have been away. But I shall soon make them kno me agen, by feading them and attending to them.

I miss your Bob a great deel. I wish he could have come with me. But he is going to be a farmer now, and will have to look after horses, and coves, and piggs. But he has promist to come up and see me nekst summer if I don't go to Woodburn agen. But I

shall try to get Ma and Pa to send me to your father's agen when the warm wether comes.

Tell Ted we all want him at home, and shall be glad when the hollydays come. Pa and Ma send their love. I remane, yours truely,

ERNIE INSTONE.

Letter No. 151.

From BEN BARLOW to CHARLIE THORNTON.

Waterside House, Worcester,
December 9th, 187—.

MY DEAR CHARLIE,—

I cannot tell you how pleased I was to receive the news contained in your last letter.

I am sure you deserved the testimonial presented to you, for I could see when I was over that the Band of Hope owed a great deal of its success to your punctuality and attention. Still it must have been very gratifying to find your services appreciated to such a degree, and, coming just after your troubles and anxieties, the presentation was no doubt peculiarly gratifying. I can quite understand that you found it difficult to express your feelings without betraying too much emotion.

I am glad to hear that you intend filling up your leisure with study. I think mathematics would suit you first-rate. You were always well up in figures. It might be of use too some day, in qualifying you for one of the higher offices in the General Post-office, London. You should talk it over with Mr. Bland. He came off with honours in mathematics at the University. He might perhaps take you in hand himself. I'm sure he would if he could spare the time.

Pray excuse more now. We are pegging away in preparation for the Christmas examination, and my letters will now have to grow shorter and fewer, if I am to do myself credit in the competition.

With kind regards to your mother, and love to yourself, I remain,
your old friend,

BEN BARLOW.

Letter No. 152.

From BOB to BEN BARLOW.

Lowlands, near Woodbourne,
December 11th, 187—.

DEAR MASTER BEN,—

Thank you for your last letter. I am glad you approve of my coming here. I like the place very much so far. I think I shall like the work and the business, and I hope, after a bit of experience, I shall be able to make it pay me well.

As to gasts, it will be time enough for me to be afraid of them!

when I have seen one. And as to Mrs. Watson, she's a comfortable, motherly old soul, and will do all to make you comfortable when you come.

That reminds me to tell you, before I forget it, that I have got a room fitted up purposely for you to stop the night here as often as ever you like. And if Master Instone would like to come with you, the house, the dairy, and the larder are free to him for a week or two whenever he likes. For if I can't have some young folks about me, I had better stopped a poor man as I was.

I haven't got much stock yet. I only bought the best of those on the ground. But I have got a capital little pony. She's a perfect little beauty, and can do her thirty miles a day without hurting. I thought she would be just your style when I first saw her. I shan't have very much for her to do in the winter, so you can borrow her when you want her.

And now I want to beg something of you. Your sisters have given me a start in the poultry line by the present of a couple of bantams. Next spring I shall get a hatch of their eggs, and so get quite a lot. Now I want to know if you will please give me about half-a-dozen of your rabbits. I could buy some of Master Blunt or at Hammerthorpe Market, but I should like to have some I have had the rearing of. I have a capital place to keep them in. I feel sure you will let me have them to stock my new hutches with.

I am glad you think I improve. I think I shall keep on with Mr. Jones, at any rate until I get busy on the farm. I shall also keep in the band for the present. I have arranged for them to practise in the big kitchen here every other week.

I must now stop. I shall post this as I go to your father's. I made the bargain that I was to be allowed to drop into the kitchen whenever I felt inclined. So I give a call for half-an-hour most nights. Your mother wants me to go into the parlour, but I tell her I always feel more at home in my old quarters.

You won't forget to come to the Lowlands directly you come home. Remember, I am still as much as ever, your obedient servant,
Bob.

Letter No. 153.

From BEN BARLOW to ERNIE INSTONE.

Waterside House, Worcester.

December 14th, 187—.

MY DEAR ERNIE,—

Many thanks for your interesting letter. How glad I am to hear of your continued improvement in health! No wonder the friends who haven't seen you since you first left London are greatly surprised. I hope you will pay us another visit in the spring. If you do, Bob will take possession of you, I dare say, and carry you off to his delightful farm.

I am glad your rabbits have been attended to in your absence, and are grown so much bigger.

Ted will be coming to join you in a little over a week. We shall all be glad to get home for the glorious Christmas holidays.

Please excuse this hurried scribble. We are doing extra lessons now, and every moment is precious. Give my love to Pa, Ma, and your brother John. I am, yours very truly, BEN BARLOW.

Letter No. 154.

From BEN BARLOW to BOB.

Waterside House, Worcester,
December 15th, 187—.

DEAR OLD FELLOW,—

I have hardly a minute to spare, but I cannot help replying to your warm-hearted letter.

Take just as many as you care for of my rabbits, and whichever you like; and some pigeons too—I dare say there's a dovecot about your farmyard somewhere. If you take the lot I shan't care, for I am at home so little to see them.

Ted is very much obliged for your invitation, and will be glad to take advantage of it next summer. I hardly need say I shall respond to it before I have been in Woodbourne twenty-four hours. I am afraid your pony may wish you hadn't invited me. However, I'll try not to hurt her.

Thanking you again for your kind expressions of regard, I remain, your old friend, BEN BARLOW.

Letter No. 155.

From CHARLIE THORNTON to BEN BARLOW.

High Street, Woodbourne,
December 15th, 187—.

DEAR BEN,—

I have again to report unexpected favours. Last week one of the clerks from Messrs. Carson's came over to tell me he had instructions to buy all the stamps required in the office—postage, receipt, and bill-stamps—from me. This is a very considerable item. Their postage-stamps alone will average five pounds a month, and their bill-stamps will be at least as much more—some bill-stamps cost as much as fifteen shillings and a pound each. Besides the commission on these sales, they will enable me to keep a larger stock of bill-stamps, and so I shall be in a position to supply the farmers and others in the village with a stamp of any value they may want.

As if this were not enough, young Mr. Carson called to see me this morning, and after chatting for a time, he produced a list of the prices they were paying for office stationery. He asked me to look it over, and said if I found I could supply them at the same rates, he

would direct all the stationery to be got through me. I have looked it over since he went, and I find the prices will leave me a fair margin of profit, while the large orders I shall get will enable me to purchase in larger quantities, and so get a larger profit on my other sales.

Other people, too, seem anxious to deal with me as much as possible. My old friend Mr. Jones has given me a large order for slates and copybooks. Mr. Bland gets what stationery he wants from me, and your father has mentioned my name to several of the gentry round, and they come for what they want in my line.

So that, one thing with another, our business is bringing in more than ever it did in dear father's time, and it is steadily increasing. I am going to speculate in a lot of books, and shall try to push that trade, as also newspapers. I have even thought of setting up a printing-press, but that must be for future consideration.

Both mother and I feel very grateful for the goodness that surrounds us, and I am more than ever satisfied with the step I took in resigning my much-loved situation.

Don't trouble to reply to this, as you will be home in about a week, and no doubt you are now busy. Remember me to Instone. Mother sends love to you. I remain, yours very truly,

CHARLIE THORNTON.

Letter No. 156.

From BEN BARLOW to TED INSTONE.

The Laurels, Woodbourne,

December 26th, 187—.

DEAR TED,—

If you knew how much I have had to see, to hear, and to do since I arrived here on Friday evening, you would readily give the pardon I ask for not writing sooner.

I found Bob at father's directly I got in, and he wanted to carry me off to his place as soon as we had had tea. Mother would not hear of it, however, so I promised to be there early next morning. You may be sure I was there to breakfast. Such a breakfast it was! There was broiled ham and new laid eggs, hot coffee and rich cream, and I had a good appetite after my early walk across the common, Bob's housekeeper is quite a nice old lady, and she made as much fuss of me as if I were her own grandson.

After breakfast I looked over the farm buildings with Bob. Then he put his pony in a small little trap, and we drove about a dozen miles over the crisp frozen roads. The pony is a little gem—beautiful shape, perfect action, and any amount of hard work in her.

When we got back Mrs. Watson had got a plump little turkey (one fed on the farm) roasted for dinner, and some boiled ham. Didn't I enjoy it! I never thought anything so nice before. Then we had nuts and oranges for dessert, and Bob drove me home in time for a late tea with father, mother, and sisters.

We insisted on Bob coming to our house to dinner on Christmas Day, and he reluctantly consented, though at the last he tried to slink off into the kitchen to the servants. He seems thoroughly happy in his new circumstances, and will, I have no doubt, do himself credit, and be of service to others. He assumes no airs, so no one can make fun of him, and father says he is very generous in his aid to all good causes.

You will be glad to hear that Charlie Thornton looks well, though somewhat graver even than before. He is doing very fairly in business now, and is a comfort to his mother, and a favourite with everyone.

Tom Blunt is as jolly as ever, and just as impulsive. I am invited to a party at the old mill to-morrow evening.

Joe Bland is going to college after the holidays. His father has been reading with him to prepare him. I don't think he intends him for the ministry, but he wishes him to have a university education to fit him for literary work of some kind.

Williams, Wasdell, Foster, and the other fellows you met here are going on much as usual. We have arranged to profit by the present frost directly the ice on the mill-pond is strong enough to bear us.

And now, after sending love from all our Woodbourne folk to yourself and family, and wishing you the Compliments of the Season, let me finish up in the orthodox fashion—so no more at present from, yours very truly,

BEN BARLOW.

PAPERS FOR THOUGHTFUL BOYS.

BY THOS. STONELEY.

XXIII.—ENGINEERING—THE LIGHTHOUSE.

" Far in the bosom of the deep,
O'er these wild shelves my watch I keep ;
A ruddy gleam of changeful light,
Bound on the dusky brow of night ;
The seaman bids my lustre hail,
And scorns to strike his timorous tail."

SCOTT.

I.—THE EDDYSTONE.



HERE are few enterprises more heroic or beneficent than those connected with the construction and management of lighthouses. From first to last, from the rearing of the column on the rock to the monotonous nightly vigil in attendance on the lamps—from the setting to the rising of the sun—the valour, intrepidity, and endurance of all concerned are called into play, and the wild perils and stirring adventures they experience impart to the story of their

labours a thrilling and romantic interest. Most sea-girt beacons have their own legends of perils and fortitude ; and the narratives of the erection of the two great lighthouses of Eddystone and Skerryvore, which may be selected as the types of the rest, are full of incidents as exciting as any "hair-breadth 'scapes i' the imminent deadly breach."

Situated about fourteen miles south-west from the port of Plymouth, and directly in the path of English vessels returning home heavily-laden from foreign parts, the famous Eddystone rocks were long the scene of many a story of maritime disaster. The great seas brought up by the south-westerly winds blowing from the Bay of Biscay and the great Atlantic, broke here with terrific violence, often carrying vessels with irresistible force on to destruction. At other times, during the night or in foggy weather, or when the extensive range of these rocks were covered with high water, richly-laden vessels, guided even by the most cautious captains, frequently came to sudden shipwreck in these treacherous places. To erect a permanent beacon upon the Eddystone was therefore from the earliest times felt to be highly necessary ; but the task, which even in these days of scientific engineering is sufficiently formidable, was two centuries ago considered almost beyond the power of man. It was thought that even upon the highest of the rocks no workmen could long stand to their labour, for so steep was the rise of the surface exposed to the heaviest seas that the waters, meeting a sudden check, frequently flew upwards to a height of two hundred feet, and with a violence which it seemed could scarcely fail to sweep away any scaffolding or incomplete structure, with all living creatures engaged upon it.

At length an ingenious man was found willing to attempt the task. This was Henry Winstanley, a retired mercer, who resided at Littlebury, in Essex. Winstanley's design was not calculated to give confidence in the result of his undertaking. It was a picturesque and fanciful structure of many sides, somewhat resembling a Chinese pagoda or idol-house, with numerous galleries, quaint projections, and fantastic ornaments. But the most ominous part of the design was the announcement that the whole structure was to be composed of no stronger material than wood. Yet the result showed that Winstanley's ideas were far from being so visionary as was supposed. The building of it was begun in 1696, and occupied more than four years. The fourth year was spent in strengthening the supports, and so confident did Winstanley feel of the stability of his edifice, that he declared his wish that the fiercest storm that ever blew might come on while he was in it. The fiercest storm that had raged within the living memory did come whilst he was lodging in it on the night of November 26th, 1703, and when on the morning of the 27th men looked for the lighthouse not a vestige of it was visible. With the builder and his workmen it had been swept away.

Strangely enough, the next person who undertook to execute the

task of erecting a permanent lighthouse on the Eddystone rock was also a silk mercer. His name was John Rudyerd, and he kept a shop on Ludgate Hill. Rudyerd worked on an entirely original plan, and successfully completed his work in three years. Instead of a polygon, like Winstanley's erection, he chose a perfectly circular form for his building, and carried up the elevation in that shape; and instead of mere wood, it was built of granite and solid oak timber, and was, on the whole, a far more weighty structure than the pagoda of the unfortunate Winstanley. Rudyerd's lighthouse successfully resisted the storms of forty-six years, and was at length destroyed, not by water, but by fire. There is not any reason for supposing that it might not have continued much longer if it had not been accidentally destroyed by fire. On the night of the 2nd of December, 1755, but under what circumstances it is not exactly known, the dried and sooty rafters of the lantern were found to be in flames, and the inmates of the lighthouse could not subdue them. Driven from floor to floor as the fire worked downwards, the men were at last obliged to seek shelter under a ledge of the Eddystone rock itself, and in this dreadful position, fourteen miles from land, to await the succour which came off from the shore when the catastrophe of the lighthouse was apprehended. The lighthouse was totally destroyed, and when, a year afterwards, John Smeaton surveyed the site, he had difficulty in recognising where the old structure had stood.

In spite of the opinion strongly entertained at Trinity House, Smeaton, who was entrusted with the work of rebuilding the beacon, decided upon using stone, not wood. One wooden building had been washed away and another had been burned, and he was resolved that if he could help it the thing which had been should not be the thing which might be in the matter of the Eddystone lighthouse. With the greatest possible care, with untiring industry, with an incessant personal application that savoured of devotion, Smeaton set to work. In the face of difficulties from foul weather—and these were often of a character wholly to prevent work for days together—in the face of engineering and mechanical difficulties for which the science of the day had not any remedy, and which had to be overcome by the suggestions of his own genius, Smeaton persevered—often discouraged, but never cast down; never advancing a step without being first thoroughly persuaded it was a wise one, never having cause to regret a single step he had taken. The work was indeed wonderful both in design and execution. Carefully, thoroughly, wisely did Smeaton consider every principle that could possibly help him, and his own hands commenced the execution of every detail, his own eye superintended the entire work. By a wonderful adaptation of the principle of dove-tailing, he knitted every stone to every other stone, and wove the whole foundation into the fabric of the rock. To large central stones the whole of the outer stones were bound, and so the courses, joined as well as cemented together, were piled one upon the other till the whole became a mass of solid masonry, tied in unbreakable

union to each other and the rock. Upon such a foundation the upper part of the lighthouse was built, and was finished on the 9th of October, 1759. It rose to a height of seventy feet. The last work of the mason was to cut the words "Laus Deo," or "Praise be to God," over the last stone placed over the door of the lantern. Since its completion till the present, Smeaton's work has stood unmoved. The storms of a century have burst upon it, the most terrific waves, the most dreadful winds have beaten upon it, but it has not fallen.

II.—THE SKERRYVORE.

The necessity of a lighthouse on Skerryvore was fully acknowledged by the authorities soon after the commencement of the present century, but it was not until the year 1838 that the undertaking was actually begun.

The work was entrusted to Mr. Alan Stevenson, son of Mr. Robert Stevenson, the eminent engineer. The circumstances of the Skerryvore rendered it exceedingly difficult to work upon. It is distant from Tyree, the nearest inhabited island, about eleven miles; even in fine weather the intervening passage is a trying one, and in rough weather no ship can live in such a sea, studded as it is with treacherous rocks. Moreover the action of the waves on the Skerryvore has given it all the smoothness and slippery polish of a mass of dark-coloured glass. Indeed, the foreman of the masons, on first visiting the rock, not unjustly compared the operation of ascending it to that of "climbing up the neck of a bottle."

The 7th of August, 1838, was the first day of entire work on the rock, and like not a few of its successors was spent in the erection of a temporary barrack of wood for the men to lodge in on the rock. It was completed before the season closed, but one of the first heavy gales in November wrenched it from its holdings, and swept it into the sea, leaving nothing to mark the site but a few broken and twisted stanchions, attached to one of which was a portion of a great beam which had been shaken and rent, by dashing against the rocks, into a bundle of ribands. Thus in one night was obliterated the result of a whole season's toil, and with it the hopes the men cherished of having a dwelling on the rock, instead of on board the brig, where they suffered intensely from the miseries of constant sickness.

The excavation of the foundations occupied the whole of the summer season of 1839, from the 6th May to the 3rd September. The hard, nitrified rock held out stoutly against the assaults of both iron and gunpowder; and much time was spent in hollowing out the basin in which the lighthouse was to be fixed. From the limited extent of the rock and the absence of any place of shelter, the blasting was an operation of considerable danger, as the men had no place to run to, and it had to be managed with great caution. Only a

small portion of the rock could be blown up at a time, and care had to be taken to cover the part over with mats and nettings made of old rope to check the flight of the stones.

The operations of 1840 included, much to the delight of the workmen, the reconstruction of the barrack, to which they were glad to remove from the tossing vessel.

In spite of the anxiety of the gallant men to get on with their work, and their intrepidity in availing themselves of every opportunity, they were often forced by stress of weather into an inactivity which we may be sure they felt irksome and against the grain.

At length the Skerryvore Lighthouse was successfully completed. The height of the tower is 138 feet 6 inches, of which the first 26 feet is solid. It contains a mass of stonework of nearly five times the quantity of the Eddystone. The entire cost, including the steam-tug and the building of a small harbour at Hynish for the reception of the little vessel that now attends the lighthouse, was £86,977. The light is revolving, and reaches its brightest state once every minute. It is produced by the revolution of eight great annular lenses around a central light with four wicks, and can be seen from the deck of a vessel at the distance of eighteen miles. Mr. Alan Stevenson sums up his interesting narrative in the following words:—"In such a situation as the Skerryvore, innumerable delays and disappointments were to be expected by those engaged in the work; and the entire loss of the fruit of the first season's labour in the course of a few hours, was a good lesson in the school of patience, and of trust in something better than an arm of flesh. During our progress, also, cranes and other materials were swept away by the waves; vessels were driven by sudden gales to seek shelter at a distance from the rocky shores of Mull and Tyree; and the workmen were left on the rock desponding and idle, and destitute of many of the comforts with which a more roomy and sheltered dwelling, in the neighbourhood of friends, is generally connected. Daily risks were run in landing on the rock in a heavy surf, in blasting, or by the falling of heavy bodies from the tower on a narrow space below, to which so many persons were necessarily confined, yet had we not any loss of either life or limb; and although our labours were prolonged from dawn to night, and our provisions were chiefly salt, the health of the people, with the exception of a few slight cases of dysentery, was generally good throughout the six successive summers of our sojourn on the rock. The close of the work was welcomed with thankfulness by all engaged in it; and our remarkable preservation was viewed, even by many of the most thoughtless, as, in a peculiar manner, the gracious work of Him by whom the very hairs of our heads are all numbered!"



FOOTPRINTS OF GOD IN NATURE.

By GEORGE PACKER.

XXXIII.—CONCLUSION.

THE path we have for the last three years more or less regularly pursued, leads us directly into the presence of God. The reasoning is plain, and, while satisfactory to the richest and most cultivated intellects, is level with the meanest capacity. There can be no effect without a cause, and no causes preceding one another without a first cause of all, and the first cause of all must be self-existent and independent. Everywhere we have seen forces and existences in which such regularity and contrivance appear, that we can ascribe them to nothing else than Supreme Wisdom; and inasmuch as this perfect regularity and this ingenious contrivance are everywhere subordinated to the law of beneficence, they compel us to believe in the Supreme Goodness. In other words, from the wisdom and goodness that pervade the whole course of Nature, we are led to believe in a Deity in whom these attributes must exist in a higher and more perfect manner and degree. The nature of every effect proves the nature of the cause from which it springs, just as plainly as the fact of the effect proves the fact of the cause. A mighty effect proves a powerful cause; a wise effect proves an intelligent cause; a beneficent effect proves a cause that is beneficent. Our studies in the various departments of Nature have led us to a necessary belief in the agency of a Supreme Intelligence, holy and good as well as powerful, by which the fitness of means to secure ends was plainly foreseen, and from which all the beneficent adaptations with which the world abounds have proceeded. A world like ours supposes a high intelligence to conceive and plan, a mighty power to carry its designs into effect, and an overflowing goodness to desire and create the happiness of such myriads of creatures.

This argument is what is called *cumulative*. It increases in strength with every new study and every fresh discovery. Fresh discoveries not only bring fresh proofs, they give additional power to all the old ones. It is as the twisting of the strands by which the cable is made that will hold a ship safe amid the most furious storms. The greater the ground we travel over the stronger our proofs grow. Chance is soon excluded from the universe, and design is everywhere seen. The design of a limited intelligence is soon seen to be inadequate for the marvellous effects produced, and we infer an infinite mind. To comprehend, however, the full force of the argument is far beyond our power, inasmuch as it would require an experience and a wisdom that have never yet fallen to the most gifted minds. To be sensible of its utmost strength, a man should be able to survey in all their vast extent the visible works of Nature, to traverse the

boundless space through which they are spread, to use his senses well, and then to avail himself of the most scientific instruments to discover what his unaided senses could never find out; to take an account of the different beings that compose the great whole, from the tiniest blade of grass to the mightiest starry constellations; to consider then their qualities, to compare them together, and observe their mutual connections and proportions; and last, but not least, to lay bare the secret channels of his own mental life and explore the profound and mysterious wonders of the human soul. It is not a very hazardous statement to affirm that the man who can do all this has yet to be born. Yet we may be thankful that our little knowledge, crude and elementary as it is, serves to put us on the road, and show us how flowery and pleasant it is; most of all thankful that it shows us something of the glories it leads to, and the exquisite joy that will be married to enlarged knowledge when we come "to know even as we are known."

But perhaps the most convincing of all proofs of the goodness and wisdom of God is to be found in that very faculty by which we have been enabled to make the preceding reflections, and which has guided us in our studies—our Reason. It is this that broadly marks us off from the inferior creatures. The wisdom by which we act, and which governs our thoughts and desires, resides in ourselves—their wisdom is a strong instinct—a power, so to speak, from without—which directs them in certain unvarying paths from which they never deviate at will. If a spider had all the skill of a weaver, she would make something else beside her web. Were a swallow quite as skilful as a mason, he might sometimes employ other materials than those with which he invariably builds. If animals were capable of thought, new ideas would enter their minds. Reason has such fertility that even in them it must lead to fresh experiments and diversified industry. It sets man on perpetually enlarging his attainments. It reflects, deliberates, decides, and chooses. By it he can conceive of the Deity, and imitate the perfections of that great Being in whose image he was created. It is this that constitutes him monarch of the earth, and by which he sways the sceptre of empire. It is true that he cannot fly like the birds, nor is yet defended with the strength of animals that are armed with horns, talons, and destructive teeth, nor is yet clothed with furs or feathers to protect him from the inclemencies of the seasons. But the gift of reason is an abundant supply for all his wants. This informs him that whatever the earth produces is for his service, and shows him how to make them minister to his necessities. The animals sustain and defend him; they cultivate his lands, or carry his loads. The sheep resigns her fleece that he may be warm in winter, or the silkworms spin for him a lighter robe for the summer. Reason makes the oaks leave the forest, and forces the stones from the hills that he may be furnished with a habitation. If he would cross the seas to enrich himself with the produce of foreign lands, the very winds and waves become his obedient servants.

Inconsiderable as he is in size his reason furnishes him with a power which is only bounded by the earth he inhabits; his desires are accomplished at the extremity of the globe, and he can establish an intercourse with the ends of the earth without stirring from his own home. In fact reason is the centre of God's works on earth; their harmony, their perfection and end. Suppose for a moment that man were removed from the earth; confusion most dire would be the result. The sun might still enlighten the earth, but the earth is insensible and wants none of that lustre. The rains and dews might still give vegetation to the seed, and cover the fields with fruitful harvests, but these are lost riches when there is none to gather them. The earth would indeed nourish the animals, but the animals themselves would lose their importance for want of a good master, who can utilise their manifold powers. The horse and ox have great strength, but they neither needed so much force, nor such strength in feet as horns, if they have nothing else to do but to graze in the meadows. The sheep is charged with the weight and impurities of her fleece; and the cow and the goat incommoded with the redundancy of their milk. Contradiction reigns through the whole. The earth hides in her bosom stones fit for building, and metals proper for the formation of all kinds of vessels; but she has no guests to lodge, nor any workmen to employ these materials. Her surface is a spacious garden, but not beheld by any spectator; all Nature is a charming prospect, but there is no mind to appreciate it. But restore man, and replace reason on the earth, and intelligence and unity are seen to glow in every part of the fabric. Man is placed between the Deity and creatures of no understanding; and in using these creatures, gratitude to God, adoration, and love are incumbent on him. Without him all Nature would be mute, but through his intelligence every part of it proclaims the glory of the great Creator. Reason therefore necessitates Religion, the two are as much one as our two feet or hands; and men should always be devout in proportion to their intelligence. Whether we look within, or whether we look without, if we only look with a gaze brightened by that reason that makes us nearly divine, we shall be affected much as the patriarch Jacob was with the miraculous vision presented to him in his dream of earth and heaven, connected together by angels ascending and descending. He awakened out of his sleep and said, "Surely the Lord is in this place, and I know it not." A holy reverence filled his heart, and he uttered the memorable words, "How dreadful is this place! this is none other but the house of God, and this is the gate of Heaven!" The purpose of this series of papers has been to show how we are surrounded on every side by manifestations of "Him with whom we have to do." Every place to the reverent mind is the presence chamber of the Eternal. One of two attitudes we must take to Him. The ignorant and wicked man says, "Depart from me, for I desire not the knowledge of Thy ways." But the good man draws near to God. It is the language at once of the highest culture and the deepest

piety, "Whom have I in heaven but Thee? and there is none upon earth I desire beside Thee. My soul thirsteth, my heart and my flesh shouteth out for the living God."

PROVERBS OF ALL LANDS: THEIR WIT AND WISDOM.

By ENOCH GRATTON.

XII.—MISCELLANEOUS.

WE have now reached the closing article on "The Wit and Wisdom of Proverbs." In the eleven papers which have preceded this, some scores, if not hundreds, of proverbs have been noticed, and if my young readers will only fairly grasp them, and wisely use them, much will be done toward making their lives pure, beautiful, and brave. In the former papers the proverbs have been arranged in some sort of order, like flowers of the same species on the same beds. Thus we have had proverbs on wisdom and folly, labour and luck, time and opportunity, friends and companions, revenge and forgiveness, patience and impatience, goodness and badness. This paper will be like a bed containing flowers of many sizes, shapes, colours, or rather like wild flowers that grow in the meadows, on the moor, and among the hedge-rows. Let us begin with this pithy and significant saying, "A man may buy gold too dear." Gold is very valuable, very beautiful, very useful, but it has a limit to its value, and numbers of people are buying it too dearly. One man is paying for gold his bodily vigour, working too hard and too long, with too much strain and intensity, and thus bringing himself to a premature grave. Another is paying for gold all the comforts and delights of home; rarely can he spend an hour with his family. Another is paying for gold purity of heart, peace of conscience, honesty of purpose and action. A man pays too dearly for his gold when, for the sake of money, he marries a vain and worldly woman. Many a man has sold his honour, his soul, his Saviour for gold. Such a man may be called clever, successful, rich, but he makes a wretched bargain, for "what shall it profit a man if he gain the whole world and lose his own soul?" Here is another bit of good advice, "Take honey with thy little fingers"—that is, do not go in for too much pleasure. "Rejoice, O young man in thy youth, and let thy heart cheer thee in the days of thy youth," but remember that pleasure is not all.

"Not enjoyment and not sorrow
Is our destined end or way,
But to act that each to-morrow
Finds us farther than to-day."

"Trust in God and keep your powder dry." If you don't trust in God, mischief and misery are sure to befall you. Upon the grave of many a fallen, unhappy man might it thus be written: "Lo! this is the man that trusted not in God." "Blessed are all they that put their trust in Him." Still, while trusting in God, "keep your powder dry," or it wont fire; keep your brain clear, your heart fresh, your arm strong, your feet shod, your loins girt, your lamp trimmed.

"A woman conceals that which she does not know." That is rather hard upon the fair sex. It seems to imply that a woman cannot keep a secret even when she *should*. Well, if that be true, another thing which is certainly as near the truth ought to be said, that woman tells the thing she *ought* to tell more habitually than man does. Men, as a rule, have less moral courage than women have, although men may have more physical courage than women. "At two things we should never be angry. First, at what we can help; second, at what we can't help." Let us all apply this rule, then anger will grow smaller by degrees and beautifully less. "You are gude seeker but an ill finder." Some people are nearly always seeking, upsetting, overturning. Seeking what they never need have lost, picking up what they never need to have dropped, going back to fetch what they never need to have left behind them.

"It is a good fish if only it were caught." Yes, "if" is only a small word, but it often means much. The fish may be graceful and bright, all that is wanted is a net to catch it. A fish in the water and a fish in the hand are very different things. That position is very honourable if it were only won. That knowledge very useful if only gained. Those grapes would be very sweet if they were only plucked. The one thing wanted is will, *will*, WILL. "Dinna lift me before I fall." That is another bit of shrewd counsel from our Scotch friends. Men will sometimes try to lift a man before he falls, offer him help he does not need, bestow upon him honours he neither requires nor desires, thrust upon him kindnesses which are not kind, which indeed worry and bore him; but when he is down then these friends coolly pass by on the other side, simply remarking that this unhappy man ought to have kept upon his feet while he was on.

"You sit still until you sweat, and work until you freeze." Many find it hard work to do nothing, they are often utterly fatigued with setting still, and quite spent with their "masterly inactivity." Some work till they freeze—i.e., are so laborious and energetic that their blood is well-nigh chilled. A lady I well knew one day saw her servant brushing a grate so quietly and tenderly that she might have been afraid of breaking it; the lady, though not strong, took the brush and worked away vigorously until she perspired freely. The girl stood by looking on very contentedly; at last seeing the lady so warm she said, "Oh, ma'am, it never makes me sweat!" which was quite true. The girl is not alone in this respect. To some people the greatest of all the commandments might be this, "Take it easy."

"Vows made in a storm are forgotten in a calm;" vows made in sickness, in bereavement, in poverty are too often broken amid peace and plenty.

"Your head is so hot that your brains bubble over." Hot-headed people are often in trouble, and often get other people in also. Such people are not *without* brains, possibly they may have more than they can manage, and they would get on admirably if they would only "keep cool," at any rate if they would only keep the head cool. "Keep the feet warm," say the doctors; "Keep the heart warm," say the parson; but both doctors and parsons say, "Keep the head cool, clear, calm."

"You need not be so crusty, you are not so hard baked." I wish our friend Nabal Churl would dine on this bit of homely counsel every day for a month. He little thinks that *he* is "a cake not turned." Being so well done himself, he has the more right to grumble at others, at least so he thinks. "He kicks first with one foot, then with the other, then with both together; then down he comes." When Satan or Satan's servants get "exceedingly mad" against God's children, the defeat of Satan is near and certain. It was so in the case of Saul at Tarsus. He kicked against the pricks, or, as we should say in modern speech, "he run his head against the wall." He did not hurt the wall very much, but he hurt his own head sorely," and at last he fell. Thank God he rose again a wiser, kindlier, nobler man. "A woman's strength is in her tongue." *Some* of it is, but there is quite as much in her tears, more still in her grace, and tenderness, and self-devotion. Of course we all know that women can talk; it would be a great pity if they could not, seeing they often talk so well. Let us all, men and women, boys and girls, talk to better purpose. "Your bread is buttered on both sides," so it seems with some. They have good health, good friends, a good home, good temper, good fortune. The lines have fallen to them in *pleasant places*. "Prevention is better than cure." So thought the old lady when she prescribed as a remedy for sea-sickness the following: "Never go to sea, and you will never be sea-sick." Never take the intoxicating drink, and you will never be a drunkard. How long this proverb has been in existence I know not, but this I well know that men and nations are slow of heart to learn and practise it. How much crime, misery, and poverty are we trying to cure which might have been prevented. We put the match and the gunpowder close together, then when the flames rise and spread, we laboriously strive to put them out. We neglect to put our foot upon the spark, and shortly we have to fight against the mighty conflagration. A prudent man foreseeth the evil and hideth himself, but the simple pass on and are punished. We slumber and dose while our young people pass away from the school into the world; then we are in agony and despair over their recovery. "You blow hot and cold in the same breath." This is said of people who turn and scheme and go with the tide; who believe in policy rather than principle, and what will pay or

please rather than what is true, noble, and right. They praise your friend, but don't fail to remind you of some serious drawbacks in his character. He wears an excellent coat, but it does not fit him very well—is too large, is badly put together, torn here, stained there, crumpled elsewhere. He would be a good man, if only—yes, "if only," we will stop there. These hot and cold people get into the Church. "Oh," they say, "it's a fine chapel, but it wants remodeling and repairing, then I should come oftener. He is a good preacher, but not to my taste. I am rather peculiar. The singing was good; but what a horrid organist you have!" and so on, heat and cold, this and that, and yet thoroughly and heartily neither this nor that. "I would thou wert cold or hot." "Whatsoever thy hand findeth to do, do it with thy might." "Whatsoever ye do, do it heartily, as to the Lord and not unto men."

"Oh! let all the soul within you,
For the truth's sake go abroad,
Strike! let every nerve and sinew,
Tell on ages—tell for God."

SUNDAY-SCHOOL DEPARTMENT.

SCRIPTURE LESSONS FOR SUNDAY SCHOOLS.

DECEMBER.

MORNING SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
1 The Death of Eli.....	1 Samuel iv. 1—18....	Prov. xxix. 15.
8 Samuel the Judge	1 Samuel vii.....	Prov. iv. 18.
15 A King desired	1 Samuel viii.	ver. 7.
22 Saul chosen.....	1 Samuel x. 17—27 ...	Prov. viii. 15.
29 Samuel's Parting Words..	1 Samuel xii.....	ver. 24.
AFTERNOON SUBJECTS.		Golden Texts for Repetition.
SUBJECT.	FOR READING.	
FOURTH QUARTER.		
1 The Lord's Supper.....	Luke xxii. 7—20.....	1 Cor. xi. 26.
8 The Cross.....	Luke xxiii. 33—49....	Gal. vi. 14.
15 The Walk to Emmaus	Luke xxiv. 18—32 ...	ver. 32.
22 The Saviour's Last Words.	Luke xxiv. 33—53...	Matt. xxviii. 20.
29 Review of the Quarter's Lessons.		

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